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**A Longitudinal Study of Intergeneration Transfer
of Psychosocial Risk:
Aggressive and Withdrawn Girls as Mothers**

Valerie J. McAffer

**A Thesis
in
The Department
of
Psychology**

**Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montréal, Québec, Canada**

November 1990

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ABSTRACT

A Longitudinal Study of Intergenerational Transfer of Psychosocial Risk: Aggressive and Withdrawn Girls as Mothers

Valerie J. McAffer, Ph.D.
Concordia University, 1990

Longitudinal studies of socially atypical children have identified two dimensions, "aggression" and "withdrawal", as predictors of a variety of specific psychosocial and psychiatric problems in adolescence and adulthood. However, many longitudinal studies have omitted girls from their samples. Girls who are identified as aggressive or withdrawn may grow up to become mothers of a new generation of "high risk" children. The present study examined a sample of women who were rated in childhood, using a peer nomination instrument, on the dimensions of aggression and withdrawal. The goal was to assess the quality of home environment they provided for their offspring and whether their children were showing early signs of developmental problems. The 38 women in the sample were aged 16-24 when contacted for this study. All had one or more children at the time they agreed to participate. A battery of measures was taken, including the Home Inventory, which measures the adequacy of the mother's parenting skills and the degree of appropriate stimulation provided in the child's early

environment, measures of stress, and a screening measure of four realms of child development (personal/social, fine and gross motor, and language). Results indicated that the women who were rated as withdrawn in childhood tended to provide a less stimulating home environment than the other women in the study. They were less emotionally and verbally responsive to their children and less likely to provide appropriate play materials for their children. Their children showed more problems in the "social-personal" domain of development than the other children in the study. Women who were more aggressive in childhood were less responsive to their children, emotionally and verbally, and their children showed problems in their overall development and in the "social-personal" domain of development. Regression analyses indicated that aggression and withdrawal have a different impact on the environment and the offspring. Withdrawal appears to be more important in terms of interfering with the establishment of a stimulating environment, while aggression appears to have direct importance for the development of offspring. The years of education the mother had was also a significant predictor of the overall home environment score and a number of the subscales. The study suggests that girls who are identified in childhood as being highly aggressive or withdrawn may

grow up to have difficulties with parenthood. They are indeed a "high risk" population for parenting difficulties, and their children appear to be vulnerable to a variety of developmental problems. Females must be adequately represented in future longitudinal studies of atypical social behaviour if we are to obtain a complete picture of the "life-cycle" of psychosocial disorders, and of the specific needs of these high risk groups.

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A Longitudinal Study of Intergenerational Transfer
of Psychosocial Risk:

Aggressive and Withdrawn Girls as Mothers

Deviant social behaviour in childhood has received much attention as a predictor of later adolescent and adult functioning. The two patterns of behaviour which have consistently appeared in cross-sectional and longitudinal research on children's psychosocial and overall adjustment are aggression and social withdrawal (e.g., Achenbach & Edelbrock, 1984). Research indicates that children who display these atypical patterns are at risk for later psychosocial disorders (e.g., Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Janes & Hesselbrock, 1978; Prinz, Swan, Weintraub, & Neale, 1978; Robins, 1966; Roff & Sells, 1968; Rolf, 1972; Ullmann, 1957).

However, few longitudinal studies have been conducted on aggression in females due both to the lower prevalence of extreme patterns of aggressive behaviour in females (Olweus, 1981) and to generally lower rates of referral of aggressive females for clinical assessment and treatment during childhood (Offord, 1988). In spite of the low referral rate, Offord's (1988) recent epidemiological community-based study indicated that more girls showed patterns of aggression and conduct disorder than would be expected on the basis of clinic referral rates, and that such girls may

be less likely to receive special educational, or psychiatric, services than boys showing similar difficulties.

Similarly, when examining withdrawal, withdrawn girls tend to be neglected in longitudinal studies because they are referred less often for clinical assessment and treatment. Withdrawn behaviour in girls may be seen as less deviant by parents and teachers because this pattern is more consistent with gender stereotypes for females (Serbin, Marchessault, McAffer, Peters, & Schwartzman, in press).

As a result of the lack of available information, little is known about the adolescent and adult adjustment of girls who were aggressive or withdrawn as children. It has been shown that girls with these types of deviant behaviours are not liked as children (McAffer, 1987) and that they have few friends (Feltham, Doyle, Schwartzman, & Serbin, 1985), suggesting that they have problems related to social skills. It is conceivable that they may continue to have problems with social skills as adolescents. They may be more likely to do poorly in school, to drop out of school, and to become involved in drugs, alcohol, and early sexual activity.

These deviant behaviours may have further repercussions if the girls become pregnant and, subsequently, become mothers. If they have behaviour problems themselves, they

may also have difficulty developing adequate parenting skills. Because girls who are aggressive or withdrawn as children are at risk for later psychosocial problems, it may be possible for mothers' "risk status" to be transferred to their children, causing their children to also have difficulties. The process of transfer may have its roots in the home environment of the offspring. It is well established that adequate stimulation in the home is essential for normal development. "High risk status" then, may be transferred to offspring through the type of environment these women provide, including the ways in which they interact with their children.

In this section, a review of the literature will be presented, focusing on psychosocial outcomes for girls who were aggressive or withdrawn as children, variables that have been found to be important for parenting, and the relations between parenting and other variables predicting child outcome. Finally, the findings will be interpreted to present a rationale for the present study.

Aggression

Extensive research on aggression in males has established that aggression is stable and predicts poor school achievement, delinquency, criminality, and substance abuse, as well as a variety of psychiatric and psychosocial

problems (Cairns, Cairns, & Neckerman, 1989; Cline, 1980; Eron, Lefkowitz, Walder, & Huesmann, 1982; Loeber, 1982; Magnusson, 1985; McCord, 1987; Moskowitz & Crawley, 1989; Olweus, 1979; Parker & Asher, 1987).

The evidence available for females from the Epidemiological Catchment Area study indicated that girls who had a history of conduct problems in childhood also reported more psychiatric symptoms, especially somatic complaints, than did males with a similar history of conduct disorder (Robins, 1986).

Other studies indicate that females who are highly aggressive as children grow up to have school related difficulties and a high incidence of psychiatric and other psychosocial problems in adolescence (Cairns et al., 1989; Huesmann, Eron, Lefkowitz, & Walder, 1984; Huesmann, Eron, & Yarmel, 1987; Ledingham & Schwartzman, 1984; Olweus, 1981). For example, girls who had been rated as highly aggressive by teachers were found to have failed at least one grade and were also more likely to drop out of school before completing grade 11 (Cairns et al., 1989). The Concordia Risk Project found that high levels of aggression in girls and boys significantly predicted higher incidence of school failure and placement in special classes than girls who were rated as highly withdrawn or nondeviant (Ledingham &

Schwartzman, 1984). At the outset of the Concordia Risk Project there was no significant difference in intelligence between those girls who were highly aggressive and those girls who were neither highly aggressive nor withdrawn. Approximately six years after identification, members of a subsample of the original pool were individually re-assessed with six subtests from the WISC-R/WAIS-R intelligence tests (depending upon the age of the subject). The girls who had high aggression ratings obtained significantly lower verbal intelligence scores than the girls with low ratings of aggression or withdrawal (Moskowitz & Schwartzman, 1989). The IQ scores for the girls who were on the high end of the aggression dimension, rather than remaining constant over the six year period, decreased to an average of 10 IQ points lower than girls who were on the low end of the aggression and withdrawal dimensions. This was especially true for those girls who began the study at 10 years of age and were retested at 16 years of age (as opposed to those girls who began the study when they were seven and 13 years of age). Factors associated with both childhood aggression and with continuing academic deficiencies, appear to affect verbal intelligence by early adolescence.

In a longitudinal examination of aggression from 10 to 16 years of age, it was found that there was a shift in the

nature of the aggressive themes for girls, from physical aggression to an increase in social aggression and ostracism (Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989). That is, by grade seven, over one-third of the female-female conflicts involved the manipulation of group acceptance through alienation, ostracism, or character defamation. The investigators also found that teacher ratings of aggression yielded reliable correlations for individuals through the ninth grade despite different teachers, length of the study (i.e., six years), and grade level at the time of ratings (elementary, middle, and high school). These findings suggest that aggression in girls, although expressed in different ways, is stable over time.

The relations between childhood aggression and medical and psychiatric problems have also been examined. High levels of aggression in childhood predicted both psychiatric and nonpsychiatric medical problems (Schwartzman & Moskowitz, 1987). Specifically, women who were highly aggressive in childhood were more than twice as likely than all other girls to have received psychiatric treatment during adolescence. They also received the highest rate of nonpsychiatric medical treatment: higher than all other adolescent girls, and higher than males who were aggressive. When sexual or reproductive outcomes were examined, it was

found that they had more gynaecological problems, an elevated rate of birth control use, more sexually transmitted diseases between the ages of 14 and 20, and almost one and a half times as many pregnancies between the ages of 17 and 23 than girls who were in the middle of the aggression and withdrawal dimensions (Peters, 1990). Thus, aggression in girls renders them at risk for many problems in adolescence and early adulthood, including early sexual activity.

Withdrawal

The other pattern of socially atypical behaviour that has been researched in children is social withdrawal. Withdrawal has been less extensively studied than aggression and the findings tend to be inconsistent. The results do indicate, however, that withdrawal is identifiable at an early age (Coll, Kagan, & Reznick, 1984; Kagan, Reznick, & Snidman, 1987; Reznick, Kagan, Snidman, Gersten, Baak, & Rosenberg, 1986) and it becomes increasingly stable with age (Moskowitz, 1990). Studies of withdrawn behaviour that have included pre-school and school-age girls indicate that these girls have a relatively high risk of developing problems in adolescence and early adulthood (e.g., Kellam, Ensminger, & Brown, 1987; Quay & LaGreca, 1986). For example, Kellam et al. (1987) found that shyness alone was predictive of high

levels of anxiety. Others have found that girls who are rated as withdrawn have a greater risk of developing psychiatric symptoms in adolescence and adulthood, particularly in the area of anxiety (Schwartzman, Moskowitz, Serbin, & Ledingham, 1990; Quay & LaGreca, 1986). It may be possible that anxiety would in turn, leave these women susceptible to parenting difficulties. It has also been found that, despite adequate intelligence and achievement, those children who tend to be more withdrawn rated themselves low on measures of competence (Schwartzman & Moskowitz, 1987).

Parenting

The above findings pertaining to aggressive girls (e.g., sexual activity, pregnancy, school dropout, etc.) and to withdrawn girls (e.g., anxiety problems) indicate that there are good reasons to conduct research in the area of parenting behaviour. First, parenthood is an important feature of adulthood and little is known about the future repercussions of childhood aggression and withdrawal in this realm. Second, women remain the primary caregivers for most children in our society. Therefore, their behaviour as parents is of utmost importance to their children's well-being. Finally, parenting can be a point of transfer from one generation to the other (i.e., mother to child) of high

risk status. That is, parenting behaviour can directly affect offsprings' development and overall functioning. If the mother has difficulties herself due to her own developmental background, then she may not be able to parent effectively. This in turn, can affect the development of her child. Parenting difficulties can result in maternal risk status being transferred from the parent to her offspring.

Variables Affecting Mother's Parenting Behaviour
and Child Outcome

Parenting is a multi-faceted construct. Belsky (1984) suggested that variables such as the parents' own developmental history, personality, marital relations, work, and social networks, as well as characteristics of the offspring, are important when exploring parenting behaviour. He concluded that successful parenting is determined by a number of factors. These include the developmental history and personality of the parents, which affect their offspring's development indirectly by first influencing the broader environment within which the family exists (e.g., marital relations, social networks, occupational experience).

Belsky's (1984) work and the literature surveyed earlier suggest that there may be many factors mediating the

link between childhood social functioning and subsequent parenting behaviour. These include: marital relations, social network, level of educational achievement, age at first pregnancy, and current level of functioning. The following is a review of those variables that are relevant to parenting and, subsequently, child development.

Demographic Information

Socio-economic Status. Socioeconomic status (SES), or occupational status, has been shown to be important for children's development. It has been found that the offspring of lower social class mothers had a lower developmental index at 18 months than the offspring of middle class mothers (Raney & Zeskind, 1978). Further, twins who were at-risk due to small size for gestational age were found to recover cognitively if the parents were in the upper SES range, whereas children of low SES status parents continued to be at least one standard deviation below the higher SES group at 24 months of age (Wilson, 1985).

There is some evidence to suggest that the relation of SES to child outcome is rooted in the association between SES and mother-child interaction. For example, middle class mothers tend to use more flexible and psychological influence techniques and seem more responsive to the child's emotions. Lower class mothers tend to use more coercive

direction or "power assertion" (including physical punishment), and to impose more restrictions on the child's freedom (Brody, 1968; Kamii & Radin, 1967; Kogan & Wimberger, 1969; Minton, Kagan, & Levine, 1971; Streissguth & Bee, 1972; Zebiob & Forehand, 1975; Zussman, 1978). Lower class mothers also tend to be more physically intrusive in their child's problem solving, to give them more negative feedback, and to converse in shorter, less complex sentences than middle class mothers. Middle class mothers generally show a greater degree of involvement with their children (Brody, 1968; Greenberg & Formanek, 1974; Kamii & Radin, 1967; Kogan & Wimberger, 1969; Raney & Zeskind, 1978; Tulkin & Kagan, 1972; Zunich, 1961). Socio-economic status has also been shown to be related to other known risk factors such as low education, early pregnancy, and single parenthood, further increasing the vulnerability of offspring (Werner & Smith, 1977).

Educational Attainment. Parental academic history or education is a variable associated with SES. Educational attainment among a non-clinical sample of parents has been found to be strongly related to both the quality and quantity of parental interactions with their children, and to the competence of the child (Lytton, 1980). A study which examined mothers' education and babies that were small

for their gestational age found that the offspring developed normally in the cognitive realm if the mother had more years of education (Wilson, 1985). Kochanek and his associates (Kochanek, Kabacoff, & Lipsitt, 1987) found that maternal education was a more accurate predictor of later learning and behavioural competency than the child's own developmental status up to 12 months of age. Less educated mothers also appear to be more vulnerable to stress, to have fewer social supports, and to be less able to "buffer" their children from the environment when there are high levels of stress and low levels of support (Bee et al., 1982).

Current Maternal Functioning

Stress, social support, marital status and problems, teenage pregnancy, and psychopathology have been the most commonly cited variables related to parenting behaviour.

Stress. Level of stress has been shown to be correlated with both incidence of mental disorder (Andrews & Tennant, 1978; Brown & Harris, 1978; Lloyd, 1980; Paykel, 1978) and with parenting inadequacy (Egeland, Breitenbucher, & Rosenberg, 1980). Parenting behaviour, for example, has been demonstrated to be influenced negatively by stress and by lack of support (Crnic & Greenberg, 1990; Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Weinraub & Wolf, 1983). A high level of stress and a lack of support

may, therefore, affect the parenting environment and serve to increase vulnerability in offspring.

Marital Status and Problems. Marital status and problems have been shown to affect both the mother's ability to parent and the child's development. One study which examined high-risk children, found that, even with age, education, and SES variables controlled, single mothers provided less optimal environmental stimulation than did two-parent families (Allen, Affleck, McGrade, & McQueeney, 1984). More specifically, Allen and associates found that single mothers provided fewer appropriate play materials at nine months, they were less involved with their children, and they provided fewer opportunities for variety in daily stimulation at 18 months than mothers who were married.

Within two-parent families, a somewhat surprising finding is that mothers who are slightly discontented in their relationships with their husbands tend to compensate for that by being more involved in teaching their children; whereas fathers provide less positive feedback and are more intrusive (e.g., Brody, Pellegrini, & Sigel, 1986). Other studies which have examined the effects of marital discord on offspring find that there is a detrimental affect on the children, which is evidenced by a greater incidence of behaviour problems. They also find that the type and degree

of problems exhibited by the children are related to the degree of satisfaction in the marriage, the type of discord that is evidenced in the marital relationship, and the amount of stress in the family (Emery, 1982; Margolin, 1981).

Teenage Pregnancy. Teenage pregnancy can signal heightened risk for problems in parenting and in the development of offspring. As with single parenthood, the risks involved in teenage parenting are complex and may be due to the interaction of a number of factors, including poorer prenatal care, poorer maternal physical state (e.g., medical problems, less optimal reproductive age), lower SES, and less effective parenting skills (Hechtman, 1989). A number of studies have linked teenage parenting to increased vulnerability of offspring. One study, for example, indicated that the infants of teenage mothers showed higher frequencies of neonatal complications, and that by age four, they had lower IQ scores, a higher retardation rate, less advanced motor development, and a higher frequency of deviant behaviour than children of older mothers (Bronman, 1981).

Another study found that young mothers tended to talk less to their children, were less involved in playing with their infants, and were less positive when interacting with

their babies than older mothers (Culp, Culp, Osofsky, & Osofsky, 1989). Similar findings between an increase in birth complications and poor cognitive performance have been found in other studies (Oppel & Royston, 1971; Field, 1981; Furstenberg, 1976; Furstenberg, Brooks-Gunn, & Morgan, 1987). Many studies find evidence of higher risk for offspring of teenage mothers, even when the effects of SES are controlled statistically.

Psychopathology. The outcome for children of women with some form of psychopathology has been one of the most prolific areas of research in the past 30 years. The literature is too vast to be discussed here in detail. However, a few points will be highlighted. The majority of the research focuses on mothers who are either depressed or schizophrenic/psychotic. Studies of children of depressed parents (usually mothers) indicate that the offspring have an increased rate of general adjustment problems and clinical depression (for a review see Downey & Coyne, 1990). These difficulties are evident from infancy to early adulthood, and have been observed by peers, teachers, research observers, and parents. The adjustment problems include social and academic difficulties, as well as both internalizing and externalizing behaviour problems (e.g., Goodman, Lynch, & Brogan, 1989).

Studies have also shown that depressed mothers have parenting difficulties. Compared to non-depressed mothers, moderately but not severely depressed women, were more likely to be physically violent, and both moderately and severely depressed women were at an increased risk for high frequencies of verbal/symbolic aggression (Zuravin, 1989). Maternal depression has been associated with an increase in use of authoritarian control and control through anxiety induction, rather than rational discipline strategies (Stoneman, Brody, & Burke, 1989). Not all of the problems, however, are specific to depression. Women who experience high stress and distress, or other forms of psychopathology, have the same problems as women who are depressed (e.g., Lee & Gotlib, 1989). Thus, it may not be the depression that leaves one susceptible to parenting problems but the associated factors that can accompany depression or other psychopathology (e.g., stress).

The results of the studies examining children of mothers with schizophrenia, or some form of psychosis, are much the same as those of children of depressed mothers. There are some studies, however, that indicate that children of schizophrenic mothers have fewer problems (depending on age) than children of depressed mothers (e.g., Sameroff, Barocas, & Seifer, 1984; Sameroff, Seifer, Zax, & Barocas,

1987). This does not suggest that these children do not have problems. On the contrary, they are noted to have both cognitive and social deficits (e.g., Goodman, 1987), neuromotor abnormalities, and susceptibility to obstetrical complications (Walker & Emory, 1983). A longitudinal study found that there was a significant increase in the rate of anxious attachment at 12 months of age for offspring of schizophrenic women as compared to the offspring of women who had other psychiatric disorders (Naslund, Persson-Blennow, McNeil, Kaij, & Malmquist-Larsson, 1984).

Home Environment

Difficulties in parenting also refer to the type of environment the mother provides for her child. The home environment itself has been shown to be predictive of a child's development. There is unanimous support for the notion that intellectual competence is associated with an emphasis on varied experiences and encouragement of development, appropriate materials, and parental involvement (Bradley, 1981; Bradley & Caldwell, 1982; Casey & Bradley, 1982). In their longitudinal study, Werner and Smith (1979) found that children who were born into chronic conditions such as low SES, low income, single parenthood, and lack of medical care, which could lead to minimal brain dysfunction (MBD), low educational stimulation and low emotional support

showed nine- and seven-fold increases, respectively, of the incidence of MBD over children who had similar initial problems, but who had adequate educational stimulation and emotional support. It has been found that non-organic failure-to-thrive children have had homes that were disorganized and mothers who were less responsive and less accepting of their child's behaviour (Bradley, Casey, & Wortham, 1984). One study compared the home environment with and SES with IQ (Bradley, Caldwell, & Elardo, 1977) and results indicated that the home environment alone predicted IQ better than SES. Furthermore, when the home environment and SES were combined to predict IQ, there was no improvement in predictability over the home environment alone. Similar findings are illustrated using different samples and outcome measures (Billings, Jacobson, Jacobson, & Brumitt, 1989; Brumitt & Jacobson, 1989) as well as different ethnic groups and cities (Bradley et al., 1989).

Summary

The above review suggests that if women have had problems such as being aggressive or withdrawn in their developmental history, this may have implications for their ability to parent and to provide a stimulating and optimal environment in which their offspring can develop to their potential. This analysis suggests that the process through

which risk may be transferred from mother to child is through the mother's ability to parent, which may be mediated by a number of factors such as childhood behaviour, occupational status, age at pregnancy, education level, marital status and problems, psychopathology, and level of stress and support. Figure 1 illustrates a model of the hypothesized relations between the above variables. The solid lines indicate established findings while the dotted lines refer to hypothesized relationships. The model suggests that there are many potential risk points and that any one factor may contribute to difficulties in parenting. Furthermore, it has been suggested that each additional risk factor can heighten the probability that a poor outcome will be observed (Sameroff, Seifer, Baldwin, & Baldwin, 1989).

Present Study

The present study focuses on the outcome of girls who displayed deviant behaviour as children. Prospective longitudinal studies of specific outcomes for girls who are identified as showing particular patterns of socially atypical behaviour in childhood or early adolescence are lacking in the literature, as are empirical studies on outcome for their children. Most of the available literature on this topic is based on retrospective studies or follow-up studies of clinical samples. Such studies have

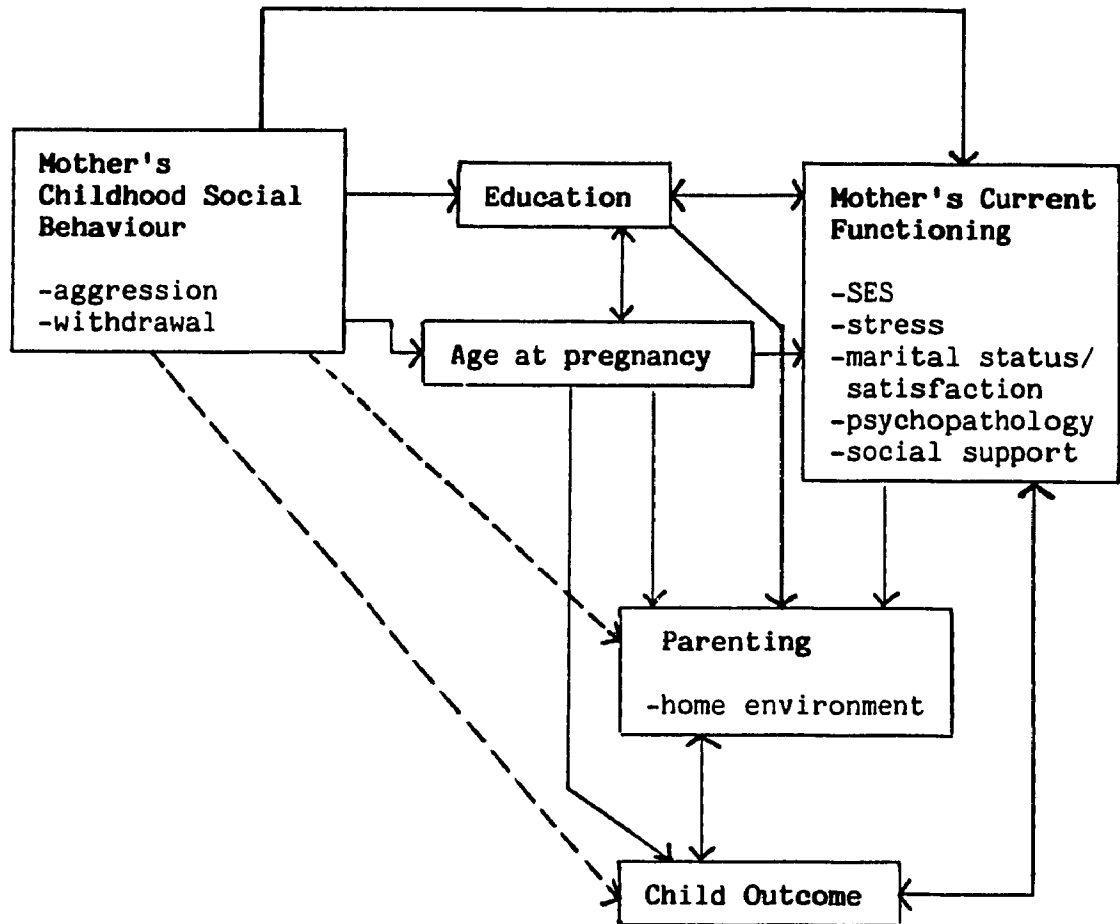


Figure 1. Model illustrating the relations between the variables thought to be important in the transferral of high risk status from mother to child.

serious inherent limitations due to selective bias in recall and sampling (e.g., Watt, Stolorow, Lubensky, & McClelland, 1970). Similarly, the processes whereby "high risk status" may be transferred across generations have rarely been examined using prospective longitudinal designs which begin with the mothers' own childhood. Consequently, for girls who display deviant social behaviour as children, little is known about what factors render them vulnerable or relatively invulnerable to negative outcomes in the area of parenting, or what factors lead to good or poor outcome for their children. One can speculate that girls who display certain atypical social behaviour patterns as children may be at risk for early pregnancy, high school dropout, and single parenthood. Further, they seem likely to produce offspring who are themselves at risk for developmental and psychosocial problems during childhood.

The present study is an examination of the parenting behaviour of women selected from an ongoing longitudinal research project studying individuals at risk for psychosocial difficulties. The study examines the types of home environment they provide for their offspring, and the early development of their children in relation to their own placement on the dimensions of aggression and withdrawal based on peer assessments in childhood.

While it would also have been of interest to include males in the present study, it was decided to focus on females because of the difficulty in obtaining comparable data concerning reproduction, parenting, home environment, and child outcome for males and their offspring. It was also felt that this area of outcome may be an especially important one for females, given socially prescribed gender roles which assign them primary responsibility in child-rearing.

Hypotheses and Predictions

Based on the literature reviewed above, two main hypotheses and a number of predictions were formulated. The first hypothesis states that the mother's childhood social behaviour, her educational status, and her current level of functioning would be important in predicting her behaviour as a parent. The literature suggests that girls who have social behaviour problems such as aggression or withdrawal as children, grow up to have many psychosocial problems, including limited education, early pregnancy, and anxiety. Such girls do poorly at school, they may have poor motivation (this may be due to lower IQ or to peer relationship problems), and they may begin to associate with others who have similar problems. They may also begin to engage in undesirable behaviours such as truancy, smoking,

drinking alcohol, early sexual activity, and, subsequently may become teenaged mothers. The review also indicates that variables reflecting current level of functioning (such as stress, psychopathology, social support, marital satisfaction) are related to parenting behaviour. The mechanism for this relation may involve the mother's inability to cope with her own problems, making it difficult for her to focus on her role as a mother.

Specific predictions were made regarding the relations childhood aggression and withdrawal would have with parenting behaviour.

Aggression. Because aggressive girls tend to have social problems, lower IQ scores, fewer years of education, behaviour problems, and a tendency to rely on aggressive and punitive means to cope with problems (i.e., as a problem-solving technique), it was predicted that childhood aggression would be associated with: mothers' emotional and verbal responsiveness to their children, mothers' provision of a less adequate overall home environment for their children, and mothers' tendency to be restrictive and punitive with their children.

Withdrawal. One of the characteristics of withdrawal is a lack of interaction with others and the environment, social skills deficit, and social isolation. Therefore, it

was predicted that childhood withdrawal would be associated with: mothers' responsiveness to their children, both verbally and emotionally, mothers' involvement with their children, mothers' provision of fewer appropriate play materials, and therefore a less stimulating environment for their children, and provision of a less than adequate overall home environment for their children.

The second hypothesis is that mother's social behaviour, mother's age at pregnancy, and mother's parenting behaviour would be important predictors of child development. The literature review suggests that there are a number of important aspects in a child's life which allow his or her development to proceed normally. The areas focused on in this study are: mother's demographic status, mother's parenting behaviour, and mother's childhood social behaviour. One of the important demographic status variables that has been related to child development is teenage pregnancy. This relation may exist because women who have children at a young age are not as mature emotionally and physically as older mothers, may not have adequate prenatal care, may have less knowledge and education about parenting, may encounter more stress, may be single parents, and may not have a good social support system. A consequence of these problems may be difficulties

with parenting which affect the child's development. As outlined in the first hypothesis, mother's childhood social behaviour is related to education level, early pregnancy, and current level of functioning. It may be through these links that maternal childhood social functioning would have its influence on child outcome. However, it may also be the case that mother's childhood social behaviour would have a direct relation to child outcome. Although the present study does not examine genetic transmission from one generation to the other, this factor cannot be ignored. It may be that there is a genetic component to the mothers' social behaviour problems and this genetic component may be transmitted to her offspring. It may also be the case that the offspring will learn deviant behaviours through exposure to such behaviour from the mother.

Specific predictions were made regarding the relations childhood aggression and withdrawal would have on development of offspring.

Aggression. Because of the above mentioned social problems, social skills deficits, lack of education and low IQ (and possibly verbal skills deficits) for women who were aggressive as children, it was predicted that childhood aggression would be associated with: problems in the social realm of development for offspring, problems with language

in offspring, and problems in the overall development of offspring.

Withdrawal. Because of the lack of social interaction and experience withdrawn girls tend to have, they may have fewer and possibly more limited social interactions with their children. Therefore, it was predicted that childhood withdrawal would be associated with: social or personal problems in offspring and problems in the overall development of offspring.

Method

Subjects

The subjects for this study were drawn from the pool of 1,774 subjects in the Concordia Risk Project. All subjects in this pool had been screened for aggression and withdrawal in 1977 and 1978 using a peer nomination procedure. Based on this screening, the sample of 1,774 was selected from a larger sample of 4,100 girls and boys who were at that time enrolled in Grades 1, 4, and 7 in the French language school system of Montreal. Quebec francophone subjects were chosen because demographic data indicate that this population has a low out-of-province mobility rate (e.g., 1% in 1977 (Statistics Canada, 1977)), thus ensuring a reasonably high retention rate for subjects.

Peer Nomination

This form of measure was selected for a number of reasons. First, the researcher can gain access to the unique relationship and perspective shared by the actual participant-observers of peer social interactions (Smith, 1967). Second, childhood peer relations have been found to be associated with psychopathology in adulthood (Kohlberg, LaCrosse, Ricks, 1972; Parker & Asher, 1987). Third, there is evidence that peer evaluation is a more potent predictor of adult maladjustment than are teacher and clinician

ratings (Cowen et al., 1973; Parker & Asher, 1987; Roff, 1970). This potency may be so not only because of peers' unique perspective, but also because there are many more of them than teachers or clinicians doing the evaluating, thereby increasing the power of the assessment procedure.

The Selection Criterion Measure

A French translation of the peer nominations instrument, the Pupil Evaluation Inventory (PEI) (Pekarik, Prinz, Liebert, Weintraub and Neale, 1976) was administered to 4,100 children in 152 classrooms. The PEI (see Appendix A and A1 for French and English versions, respectively) contains 35 items which load on three factors: Aggression (items such as "those who always get into trouble" and "those who are mean and cruel to other children"), Withdrawal (items such as "those who are too shy to make friends easily" and "those who often don't want to play"), and Likeability (items such as "those who help others" and "those who everybody likes"). Previous investigations using this scale have reported high male-female interrater agreement, high internal consistency, and high test-retest reliability (Pekarik et al., 1976) and have demonstrated the sensitivity of the instrument to subtle signs of developing maladjustment (Weintraub, Prinz, & Neale, 1978)).

Children were asked to nominate up to four boys and

four girls in the class who best fit the description of each item on the questionnaire. Children rated the boys and girls in their class in separate administrations. The total number of nominations received for each child was calculated separately for items loading on the Aggression factor, the Withdrawal factor, and the Likeability factor. Total nomination scores for each factor were subjected to a square root transformation to reduce skew, and converted to z -scores for each sex within each class to control for sex differences in baseline rates of aggression and withdrawal and the effects of differences in class size on total scores.

The advantage of computing z -scores within each sex and classroom is that the procedure established cutoffs for subject selection which took into account age- and sex-appropriate norms of behaviour, norms which are not easily specifiable a priori from raw scores. Only z -scores on the Aggression and Withdrawal factors contributed to the selection of target subjects. Those children with a z -score on the Aggression factor equal to or exceeding the 95th percentile cutoff ($z = 1.65$) in the z distribution and a z -score on the Withdrawal factor below the 75th percentile cutoff ($z = .68$) were designated as Aggressive. Similarly, children with a Withdrawal z -score equal to or exceeding the

95th percentile and a z -score on the Aggression factor below the 75th percentile cutoff ($z = .68$) were designated as Withdrawn. Contrast subjects were children whose z -scores fell between the 25th and 75th percentiles of the distributions on both Aggression and Withdrawal factors. Although an extreme groups approach was used by the Concordia Risk Project, the z -scores of the present sample on the aggression and the withdrawal factors were normally distributed. For this reason, it was possible to examine aggression and withdrawal as continuous dimensions. This was the preferred method of treating this data because the number of subjects in each of the three high-risk groups were too small to make categorical analyses meaningful (Aggressive group, $N = 8$; Withdrawn group, $N = 4$; Aggressive-Withdrawn group, $N = 4$; Contrast group, $N = 22$).

Present Study

The subjects for this study were drawn from the Concordia Risk Project during a two-year period from 1987 to 1989. There were 908 women in the total Risk Project sample. Based on recent Canadian statistics (Statistics Canada, 1985), the number of these women who would be expected to have had at least one live birth by the time of the present study would be 139. This projected size was more than adequate for the present study.

A major difficulty was encountered, however, in obtaining current addresses and telephone numbers for the sample. Despite considerable effort, only 288 women (34%) of the Risk Project sample could be contacted, and only 45 of these women had children or were currently pregnant. This number is very close to the 44 mothers that would be expected based on the Statistics Canada figures (Statistics Canada, 1985).

Of the total possible sample of 45, 41 agreed to participate in the study, thereby yielding a 91% acceptance rate. One woman who was rated as highly withdrawn refused to participate because she had an autistic child and did not want anyone to see her child despite reassurances that only the home environment would be examined. Two other women who were rated as highly withdrawn and one rated in the middle of the aggression and withdrawal dimensions refused on the grounds that they were not interested in participating in the research project. Of the 41 women who agreed to participate three were excluded from the study because they were only in the early stages of their pregnancy and would not have had their child by the end of the study. Thus, the final sample consisted of 38 women. Table 1 portrays the mean, standard deviation, range, and median of the aggression and the withdrawal z -scores for the 908 women of

Table 1

Mean, Median, Standard Deviation, Minimum, Maximum
and Range for the Aggression and Withdrawal z-Scores of
the Original Sample and the Present Sample

	Aggression		Withdrawal	
	Original	Present	Original	Present
Mean	.27	.51	.32	.11
Median	-.12	.11	-.03	-.22
Standard Deviation	1.04	1.09	1.00	.85
Minimum	-1.47	-1.06	-1.44	-1.06
Maximum	3.59	2.69	3.27	2.43
Range	5.06	3.74	4.71	3.49

original Concordia Risk Project and the 38 subjects participating in the present study. The sample of 38 women were compared to the population of 908 women in order to determine if they were significantly different. A one sample t-test indicated that there was no significant difference between the sample selected for the study and the original population. Further, a histogram and skewness test were applied to the distribution of the aggression and the withdrawal z-scores for the present sample and they were normally distributed.

The subjects ranged in age from 16 to 25 years and their children ranged in age from 1 to 71 months. The mean age of the mothers was 20 years at the time of pregnancy (SD = 2.3) and 22 years at the time of testing (SD = 2.0). The mean occupational level was 312 (SD = 86), which is equivalent to "salesperson" status. The mode and median, however, were 269, which is equivalent to "housewife" (which the majority of the women were) on the Household Prestige Scale (Nock & Rossi, 1979). The range of occupational status scores was from 166 (chambermaid) to 508 (small store owner, e.g., jewelry store). The mean number of years of education was 11 (SD = 2.0), with a range from seven to 15. The marital status of these women was as follows: 15 were married, 2 were separated or divorced, 8 were single (2 were

living at home with their parents), and 13 were living in common-law relationships (see Table 2 for means, standard deviations, and ranges of demographic information).

Measures

All of the measures were chosen for their reliability and validity (see below for each measure separately). Because all of the measures had to be completed within a limited amount of time during a home visit, selection was also based on length and ease of administration in a home setting.

Maternal Demographic Information

Maternal Personal/Social Information. The Brief Telephone Interview (BTI; Moskowitz & Prenoveau, 1988a; see Appendix B) is composed of questions about marital status, dating, education, occupation, physical health, pregnancy, and offspring. Children's names, sex, and ages, and mother's age at time of each child's birth was also recorded. The interview takes approximately 30 minutes to administer and the inter-coder reliability was 95%.

Occupational Status. Occupational status was calculated from the telephone data using the Household Prestige Scale (Nock & Rossi, 1979). This measure utilizes occupational status of the mother or her spouse, if applicable, in its calculation. It has been shown to have

Table 2

Means, Standard Deviations, and Ranges of Demographic Variables

	Mean	Standard Deviation	Range
Mother's present age	22	2.1	16 - 25
Mother's age 1st pregnancy	20	2.3	15 - 25
Child's age (in months)	24	18	1 - 71
Number of children	1.18	.46	1 - 3
Years of Education	11	2.0	7 - 15

good test-retest reliability ($r = .87$). The possible occupational status scores range from a low of 122 (labourer) to a high of 812 (physician). The occupational status used for the present study was either the women who participated in the study or their husbands' (or common-law husbands') status, whichever was higher. For those women who were single, her occupational status was used.

Education. Education has been widely viewed as an important factor for parenting and child outcome. The number of years of education the mother had was obtained from the BTI.

Marital Status. Single parenthood may be viewed as a factor that can impact negatively on family environment, and also potentially on a mother's capacity to parent effectively. The presence and stability of marital and cohabiting relationships for the mothers was assessed by the BTI.

Current Functioning

Symptomatology and Psychopathology. Maternal psychopathology and symptomatology have been linked with parenting problems and offspring's vulnerability for adjustment problems (Sameroff & Seifer, 1983). Two measures were used to assess current level of symptomatology and psychopathology in the mothers. The Symptom Checklist-90

(SCL-90; Derogatis, Lipman, & Covi, 1973; see Appendix E and E1 for French and English versions, respectively) is a questionnaire that has 90 items that characterize nine psychiatric categories: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. There are also three global ratings of severity, a global severity index, a positive symptom distress index, and a positive symptom total. Reliability for the nine categories ranged from .70 to .90 (Cronbach alpha's) and the test-retest reliability over a one week period ranged from .78 to .90. The nine categories have been shown to be significantly correlated to MMPI scales measuring similar constructs (correlations ranged from .42 to .64; Derogatis, Rickels, & Rock, 1976). The SCL-90 was standardized on three samples: 1,002 heterogeneous psychiatric outpatients; 974 non-patient normals (these were the norms used for the present study), and 112 adolescent psychiatric outpatients.

The Premorbid Adjustment Scale (PAS; Campoon-Spoor, Potkin, & Wyatt, 1982; Moskowitz & Prenoveau, 1988b; see Appendix F) was available from the BTI. It assesses general levels of adjustment, such as independence level, highest level of functioning, personal adjustment, and degree of interest and energy in life. Items are rated on a scale

from 0 - 6, with "0" denoting the hypothetically healthiest end of the adjustment range. The PAS has demonstrated satisfactory inter-rater reliability ($r=.85$) and has successfully discriminated between a sample of normal individuals, a sample of schizophrenics, and a sample of chronically hospitalized patients. The PAS was also significantly correlated to one of the most widely used premorbid adjustment scales: The Premorbid History section of the Phillips Prognostic Rating Scale (Campoon-Spoor et al., 1982).

Stress. Heightened levels of stress have been found to affect parenting behaviour negatively, which may increase the vulnerability of offspring for impaired development (Crnic et al., 1983; Egeland et al., 1980). The Life Experience Scale (LES; Sarason, Johnson, & Siegel, 1978; see Appendix C and C1 for French and English versions, respectively) is a measure of stress that contains 44 items. The subject first indicates if each event listed has occurred and then rates how stressful the item was on a positive to negative continuous scale. This scale has been used in prospective research (Egeland et al., 1980) and has been shown to be related to adequacy of parenting behaviour.

Although major life events may contribute to stress, it has also been suggested that daily stress may affect

maternal attitudes (Weinraub & Wolf, 1983). The Hassles Scale (Kanner, Coyne, Schaifer, & Lazarus, 1981; see Appendix D and D1 for French and English versions, respectively) is a 117 item self-report questionnaire which measures irritating, frustrating, distressing demands that characterize everyday interaction with the environment. The subject determines whether an event has occurred and then rates it on a 3-point scale. The Hassles was compared to other measures such as the Life Events Scale and the Hopkins Symptom Checklist. For women, the Hassles Scale was found to be significantly correlated with both these measures. The average test-retest reliability coefficient for the Hassles Scale over a nine month interval was .79 (Kanner et al., 1981). The Hassles Scale has also been found to be a better predictor of concurrent and subsequent psychological symptoms than measures of life events (Kanner et al., 1981).

Social Support. A lack of social support has been shown to have a negative effect on parenting behaviour (Egeland et al., 1980; Weinraub & Wolf, 1983). There were two measures of social support. The Provision of Social Relations Scale (PSR; Turner, Frankel, & Levin, 1983; see Appendix G and G1 for French and English versions, respectively) is a self-report measure that assesses the subjective experience of social support from family (six

items) and friends (nine items). The two subscales have good internal consistency (Cronbach alpha's range from .75 to .87 in several studies). This measure has been shown to be significantly correlated with several other indices of subjective and quantitative social support (Turner et al., 1983).

The Quantity of Social Support Inventory (QSSI; Holahan & Moos, 1982; see Appendix H and H1 for French and English versions, respectively) evaluates the amount of interactions the mothers' parents, family, friends, the community, and religious affiliations had with them.

Marital Adjustment. Marital conflict has been associated with lowered competency and greater adjustment problems in children (Emery, 1982). To determine the presence of marital discord, the Locke-Wallace Short Marital Adjustment Test (SMAT; Locke & Wallace, 1959; see Appendix I and I1 for French and English versions, respectively) was administered to each mother who was married or in a spousal relationship. This self-report measure of marital satisfaction has 15 items and has been demonstrated to have good reliability (Spearman-Brown $r=.90$) and to be able to differentiate between those who have adjusted well to their marriage and those who have not (Kimmel & VanDerVeen, 1974; Locke & Wallace, 1959).

Obstetrical Risk. Early pregnancy places mothers and offspring at high risk for obstetric problems. Obstetrical complications were assessed using the Rochester Research Obstetrical Scale (RROS; Sameroff, Seifer, & Zax, 1982; see Appendix J and J1 for French and English versions, respectively) which has 27 items divided into three categories: prenatal (six items), perinatal (13 items), and postnatal (eight items). This scale was completed using information from the mother and from the child's medical book. This instrument is predictive of early measures of infant functioning and of adaptive behaviour at 30 months (Molfese & Thomas, 1985). The validity of the scale has been established with normal women and mentally disordered women in a series of studies (Sameroff, 1979; Sameroff et al., 1982; Zax, Sameroff, & Babigian, 1977).

Parenting Behaviour

Developmental Knowledge. Parental knowledge and understanding of child development is a strong indicator of parenting behaviour. Appropriate expectations for child behaviour differentiate parents who exhibit deviant parenting behaviour from those who do not (Azar, Robinson, Hekimian, & Twentyman, 1984; Azar & Rohrbeck, 1985; Field, 1981). The Concepts of Development Questionnaire (CDQ; Sameroff & Feil, 1985; see Appendix K and K1 for French and

English versions, respectively) is a 20 item measure designed to assess parental understanding of child development on a continuum from "categorical" to "perspectivistic." At the categorical end, child development is seen as a determined expression of single cause such as constitution or environment and reflects a rigid approach to childrearing (e.g., "A child who isn't toilet trained by 3 years of age must have something wrong with him"). At the perspectivistic end, child behaviour is seen as the outcome of complex, transactional processes (e.g., "Children's problems seldom have a single cause") and reflects a more realistic and flexible approach to childrearing. Items are rated on a four point scale from "strongly agree" to "strongly disagree." The questionnaire was standardized on a sample of 80 mothers with pre-school age children. They were both English and American and they were recruited so that all SES levels were attained. Cronbach's alpha for the questionnaire is .82 (Sameroff & Feil, 1985). Prospective research with the CDQ has found that parenting attitudes are predictive of the intellectual functioning of offspring, and demonstrated a risk of poor outcome for children of parents with extremely unrealistic developmental expectations (Sameroff & Seifer, 1983).

Home Environment. A large body of literature has

established a strong link between the quality of environmental stimulation available to a child early in life and the child's subsequent developmental progress (Allen, Affleck, McGrade, & McQueeney, 1983, 1984; Bradley & Caldwell, 1976; Bradley & Casey, 1984). The goal was to measure the adequacy of the mother's parenting skills and the degree of appropriate stimulation provided by the child's early environment. There was an absence of an appropriate measure that would cover the age range of the sample. The Home Observation for Measurement of the Environment (HOME; Caldwell, Heider, & Kaplan, 1966), however, has two versions that would sufficiently cover the age range. The first form is for children aged birth to three years (see Appendix L and L1 for French and English versions, respectively) and includes the following six scales: Emotional and Verbal Responsivity of the Mother, Avoidance of Restriction and Punishment, Organization of the Physical and Temporal Environment, Provision of Appropriate Play Materials, Maternal Involvement with the Child, and Opportunities for Variety in Daily Stimulation, as well as a global quality of environment scale based on the total score. Items on the inventory are answered "yes" or "no" by the observer. The other form is for pre-school aged children (three to six years; see Appendix M and M1 for

French and English versions, respectively). The Pre-school form includes the following eight scales: Stimulation Through Toys, Games, and Reading Materials, Language Stimulation, Physical Environment: Safe, Clean, and Conducive to Development, Pride, Affection, and Warmth, Stimulation of Academic Behaviour, Modelling and Encouragement of Social Maturity, Variety of Stimulation, and Physical Punishment, as well as a global quality of environment scale based on the total score. Again, the items are answered "yes" or "no" by the observer.

In addition to the applicability to the ages, there were other reasons why the HOME was chosen. It has been widely used, it has been standardized, it has been validated, reliability studies have been conducted, it has been shown to be a better predictor of child development than SES, and it is able to differentiate abusive and neglectful families from non-deviant families.

The HOME Birth to Three version was standardized on 174 families from Little Rock, Arkansas that were both black and white and ranged in their socioeconomic status. The HOME has demonstrated good internal consistency (Kuder-Richardson reliability coefficients of .38 to .89), and the stability over six and 12 month periods ranged from .24 to .77 (Caldwell & Bradley, 1979). Very similar findings occurred

when the HOME Pre-school version was standardized with 238 Little Rock, Arkansas families.

The HOME versions have been utilized in six different regions in Canada and the United States and with three different ethnic groups in an attempt to examine the generalizability of environment/development relationships (Bradley et al., 1989). They found that there was a fairly consistent relationship between HOME scores and children's developmental status, although there were some ethnic and social class differences. Furthermore, studies have examined the home environment and malnutrition (Cravioto & DeLicardie, 1972), language development (Wulbert, Inglis, Kriegsman, & Mills, 1974), and high-risk families (Ramey, Mills, Campbell, & O'Brien, 1975).

Other research with the HOME has found it to be a good predictor of a child's developmental progress and of IQ (Bradley et al., 1977). For example, the HOME total score was able to predict IQ equally well at 54 months when it was measured at 6, 24 (Form 0-3 years), 36, or 54 months (Form 3-6 years) ($r=.44$, $r=.57$, $r=.54$, and $r=.58$, respectively; Caldwell & Bradley, 1979).

Although both versions examine the home environment, differences were found between the two versions. When the age of the child was entered into a regression equation to

control for the two versions of the HOME, it became the only variable that was significant and it accounted for a great deal of the variance. Upon examination, the construct of home environment can be similarly judged and scored for the overall quality of the home environment for the two versions. However, when one examines the specifics about what constitutes a good home environment for children of different ages, the categories to be assessed are different. For example, one category in the Pre-school version is Language Stimulation. In contrast, the HOME Birth to Three version has no items dealing with this, let alone an entire category. Furthermore, although there are many identical items, the cluster of items within similar categories are different. Therefore, the only possible and appropriate way of combining the two versions, and therefore utilizing the entire sample, was to utilize the Overall Home Environment scores for each child. These scores were converted into standardized z-scores within each version and the subsequent z-scores were then utilized in the analyses.

Child Outcome

Developmental Level: The literature has consistently shown that cognitive functioning is a strong predictor of a child's later achievement and psychosocial development (e.g., McCall, 1979). There was no one measure that could

be utilized to assess the cognitive development of the children in the sample because the age range of the children in this sample was large (1 - 72 months). There was, however, one measure that could assess the overall development of the child (as opposed to IQ). Thus, the Denver Developmental Screening Test (DDST; Frankenburg, Dodds, & Fandal, 1973; see Appendix N and N1 for French and English versions, respectively) was utilized. The DDST is comprised of 105 items which assess the development of the child in four realms: personal-social, language, gross motor, and fine motor, between the ages of birth to six years. The DDST was selected because it is standardized, easy to administer, widely used by pediatricians and hospital staff, and identifies problems of development across a broad spectrum. The DDST was standardized on 1,036 (543 males, 493 females) normal Denver children between the ages of two weeks and 6.4 years who represented all levels of SES. Because developmental changes occur faster at the younger ages, the age groupings covered a shorter time span at the younger ages than for the older children. For example, children were grouped into ten-day intervals from two weeks through to 14 months of age. The interval was increased as the children were older. The norms were calculated as follows: the percent of children in each age

group who passed each test item. From these figures, a smoothed percent-passing curve was computed for each item. On this curve, the age at which 25%, 50%, and 75% of the children who pass an item was determined.

Test-retest reliability for the DDST was determined by retesting a group of children one week later. For each child the percent of items performed the same way one week later ranged from 90% to 100%. In order to test validity, the DDST, as well as the Stanford-Binet and the Revised Bayley Scale of Infant Tests, were administered to 236 children. The correlations ranged from $r = .86$ to $r = .97$ (Frankenburg, Camp, & Natta, 1971).

For the purposes of this study, the DDST was scored as follows. A child was considered to have failed an item if he or she did not succeed in passing a task that at least 75% of the children of that age pass. The total number of failures was summed for each child to yield a failure score for each of the four realms of development. An overall level of failure was also calculated for each child by summing the total number of failures in all four realms.

It was not possible to calculate a percentage score for each child (i.e., the number of failures divided by the total number of items administered) because the number of items administered differed for each child, based on age and

ability. A percentage score would have been confounded by the fact that a child who failed one item was automatically given additional items at a younger age level to establish a basal level. The greater number of additional items that would be passed would have the result of making that one failure less significant (i.e., one divided by four is a higher percentage of failure than one divided by ten). Because the number of items given was confounded with the age of the child, the age of the child was included in all regressions predicting DDST scores as a control variable for the number of items administered.

Procedure

All measures were translated into French. To check that the translation adequately preserved the original measure, the measures were re-translated into English by a different person and compared with the original. The process was repeated until equivalent forms were developed.

Subject Retrieval

Subjects were contacted through current project files of addresses. If a woman had more than one child ($N = 6$), her oldest child was selected for the study.

Brief Telephone Interview

All 288 women from the original sample were contacted by telephone for a brief (approximately 30 minutes)

interview. This procedure provided a current record of pregnancies and births. Any woman that had a child or was pregnant was asked to consent to a home visit. The subjects were told that the home environment they are providing for their child and the child's development were being examined. They were, however, not informed of the specific hypotheses of the research. Subjects were told they would be paid \$50.00 for their participation upon completion of all measures. Demographic information was subsequently obtained.

Home Visit

One pair from a four-member team consisting of a graduate student, a research assistant, and two honours undergraduate students went to each home for a visit lasting approximately two to four hours. During this visit, the mother completed the self-report questionnaires, and the researchers completed the HOME inventory and the DDST. Assistance and explanation of the questionnaires were provided to subjects when it was required. In cases where the mother was unable or unwilling to read, the questions were read to her by the researcher.

Results

Preliminary Examination of Data

A descriptive analysis (i.e., frequency, distribution, etc.) of all variables was done in order to determine whether or not transformations should be carried out to correct for skewness of the data or outliers. None of the variables were significantly skewed nor were there any outliers: therefore no transformations were necessary. Means and correlation coefficients were then calculated for the variables used.

Reduction of Variables and Data Set

Given the sample size and the analyses planned, the number of variables had to be reduced. The selection of variables to be retained was based on the theoretical importance of each construct for the hypothesis being tested and the statistical properties and intercorrelations of the different measures.

The following describes the variables chosen and the rationale for their inclusion. The outcome variables were the Overall Number of Failures on the Denver, the Number of Failures on the four subscales of the Denver, the six subscales and the total score of the HOME Birth to Three version, and the Overall HOME z -scores (both the Birth to Three and the Pre-school versions). The predictors included Mother's childhood Aggression and Withdrawal z -scores,

Mother's childhood Aggression and Withdrawal z-scores, Number of Years of mother's Education, Intensity of Daily Hassles, Mother's Age at Pregnancy, and Child's Age. In addition, the Overall HOME z-scores were used as predictors in analyses of Denver failures.

The study is concerned with the constructs of aggression and withdrawal and predictions that can be made based on these childhood behaviours, therefore, the Aggression and Withdrawal z-scores were retained.

It was deemed important to include a measure of educational and/or occupational status because the findings in studies of young mothers indicate that education was one of the single most important risk factor (or buffer) along with SES and both were found to be important in terms of providing a good home environment. The two variables in this study that pertained to these areas were the number of years of education the mother had and occupational status. Because years of education and occupational status were highly correlated, occupational status was dropped because there was less variance within this variable (i.e., 42% of the women were housewives and had the same occupational status score).

Previous research suggested that stress was an important mediator of parental competence. Two types of

stress were measured in the present study: negative life events and daily hassles. Because the daily hassles scale had a larger range and variance and a smaller skew than the life events measure it was the preferred measure of stress for the data analyses. Therefore, the Hassles Scales was retained and the Life Experience measure was dropped. The Hassles Scale yielded three possible scores: the total number of items that were endorsed, the sum total of the endorsed items, and a global severity index (the sum total divided by the number of endorsed items). The last index is identical to that used by the SCL-90 scoring system. Derogatis, Yevzeroff, and Wittelsberger (1975) suggest that this intensity or global severity index represents the best single indicator of the current level or depth of a problem and should be utilized in most instances where a single summary measure is required. Therefore, the Hassles global severity index was retained.

A demographic variable that was important to retain was the mother's age at pregnancy. Previous research has shown that teenage mothers have problems parenting and furthermore, the offspring often have problems as well (e.g., Hechtman, 1989). Because the sample included women of various ages, it was important to take age at pregnancy into account.

A further demographic variable that had to be retained was age of child. The fact that the HOME measure was different for children over and under age 3 made it essential to include child's age.

Finally, although it appeared from the literature that current maternal functioning, marital status, marital satisfaction, and child-rearing knowledge might all be relevant to home environment and child development, and therefore that these should be controlled for in the study, none of these variables were significantly correlated with any of the outcome measures. Since these measures appeared not to be relevant to outcomes for the sample, they were omitted from all analyses.

In summary, the outcome variables were the Overall Number of Failures on the Denver, the Number of Failures on the four subscales of the Denver, the six subscales of the HOME Birth to Three version, the Overall HOME \bar{z} -scores (Birth to Three version), and the Overall HOME \bar{z} -scores (both the Birth to Three and the Pre-school versions). The predictors included Mother's childhood Aggression and Withdrawal \bar{z} -scores, Number of Years of mother's Education, Intensity of Daily Hassles, Mother's Age at Pregnancy, and Child's Age. In addition, the Overall HOME \bar{z} -scores were used as predictors in analyses of Denver failures.

Prediction of the Home Environment for the Entire Sample

The first hypothesis stated that the mother's childhood social behaviour, her educational status, and her current level of functioning would be important in predicting her parenting behaviour. Major variables that were considered potential mediators of outcome were selected for direct multiple regression analyses. Direct regression rather than stepwise regression was used for four reasons: it is a more conservative test than stepwise regression; it requires half as many subjects than stepwise regression; stepwise regression is known to capitalize on chance; and direct regression controls for all the variables in the equation simultaneously. These factors are especially important when the sample size is small (Tabachnick & Fidell, 1983). Tests for normality and homoscedasticity (i.e., normal probability plot of residuals and residuals scatterplot) were conducted to ensure that the assumptions for multiple regression were not violated (Tabachnick & Fidell, 1983). The recommended minimum number of subjects per predictor variable for a direct regression analysis is four to five (Tabachnick & Fidell, 1983); the analyses discussed below involve seven to nine subjects per predictor variable.

In addition to Mother's Aggression and Withdrawal z-scores, the following variables were utilized in the

regression analyses: Number of Years of Education and the Intensity of Daily Hassles. Prior to any analyses of individual subscales of the HOME, an initial regression was conducted to evaluate whether or not the above variables would significantly predict the Overall Home environment for all of the children in the sample. As can be seen from Table 3, the regression equation was significant, $R = .60$, $F(4,32) = 4.45$, $p < .005$. Table 3 displays the zero order correlations, the squared semi-partial correlations, the standardized beta weights, and the t and p values for each of the predictors entered into the equation. There was one predictor that significantly contributed to the equation: Years of Education. The findings suggest that the less education a mother has, the poorer the home environment was. The Mother's Withdrawal z -score was in the predicted direction but it did not reach significance ($p < .06$). That is, the more withdrawn the mother was, the poorer the home environment was. Years of Education accounted for 16% of the variance. It appears that only withdrawal (although marginal), and not aggression, is important for the prediction of the home environment.

Prediction of the Home Environment for a Subsample (N = 28)

Intercorrelations were performed for the HOME Birth to Three Years version (the sample size was too small to

Table 3

Direct Multiple Regression Predicting Total Home
Environment For All 38 Subjects

Variable	r	sr ²	Beta	t
Years Education	.47	.16	.41	2.69**
Withdrawal	-.44	.07	-.31	-1.93t
Aggression	.05	.01	.08	.53
Daily Stress	.26	.00	.07	.48

$R = .60, F(4,32) = 4.45, p < .005$

Note. t < .10 * < .05 ** < .01 *** < .001

perform these analyses reliably for the HOME Pre-school version, ($N = 10$)). Five of the six HOME environment subscales were significantly correlated with the Overall HOME score (see Appendix O). The one subscale that was not significantly correlated with the Overall score was the Avoidance of Restriction and Punishment, $r(37) = .35$, $p < .10$. Intercorrelations among the six subscales suggested that, in general, they all measure different aspects of the home environment. The only subscale that was significantly correlated with other subscales was the Opportunity for Variety of Daily Stimulation ($r(37) = .39$, $p < .05$ with the Mother's Emotional and Verbal Responsivity and $r(37) = .53$, $p < .01$ with the Organization of the Physical and Temporal Environment; see Appendix O).

Because the above overall regression equation had a significant multiple correlation (R), it was deemed necessary and more comprehensive to conduct further analyses to determine which variables predicted specific aspects of the quality of the home environment. Only the HOME Birth to Three Years of age form could be used in the analyses because, while the number of children in this age range ($N = 28$) was sufficient for statistical purposes, the number of children in the HOME Pre-school age range ($N = 10$) was insufficient. The seven HOME factors that were used as

dependent variables for the subsequent analyses of the HOME Birth to Three Years Form were: Overall Home Environment, Emotional and Verbal Responsivity of the Mother, Avoidance of Restriction and Punishment (also referred to as Acceptance of the Child), Organization of Physical and Temporal Environment, Provision of Appropriate Play Material, Maternal Involvement with Child, and Opportunities for Variety in Daily Stimulation.

The same four variables were used to predict the Overall Home Environment for the 28 subjects as had been used for the analysis of the Overall Home Environment for the full sample of 38 subjects. This analysis was done to ensure that the results would replicate the initial regression analysis carried out on both age groups.

As can be seen from Table 4, the regression equation was significant, $R = .65$, $F(4,23) = 4.09$, $p < .01$. Tables 4 through 7 display the zero order correlations, the squared semi-partial correlations, the standardized beta weights, and the t and p values for each of the predictors entered into the equation. There were two predictors that significantly contributed to the equation: Years of Education and the Mother's Withdrawal z -score. The findings suggest that the less education a mother had and the more withdrawn she was as a child, the poorer the home

Table 4

Direct Multiple Regression Predicting Total Home

Environment

Variable	r	sr ²	Beta	t
Years Education	.54	.17	.45	2.61*
Withdrawal	-.43	.13	-.43	-2.25*
Aggression	-.15	.01	-.10	-.58
Daily Stress	.13	.03	-.19	-1.04

R = .65, F(4,23) = 4.09, p < .01

Note. t < .10 * < .05 ** < .01 *** < .001

environment was. These two variables accounted for 17% and 13% of the variance, respectively. The pattern of results was quite similar to the first regression except that the mother's Withdrawal z -score was a significant predictor rather than a trend.

Three of the six regression equations that examined how the variables would predict each of the subscales of the HOME were significant. First, the mother's Emotional and Verbal Responsivity to her child was significantly predicted by the four variables, $R = .62$, $F(4,23) = 3.50$, $p < .02$, with both the Withdrawal and the Aggression z -scores significantly contributing to the equation (see Table 5). The more aggressive or withdrawn a woman was in childhood the less she responded both emotionally and verbally to her child. These two variables alone accounted for 40% of the variance (23% and 17%, respectively).

Second, the Organization of the Physical and Temporal Environment was significantly predicted by the same four variables, $R = .57$, $F(4,23) = 2.72$, $p < .05$. Table 6 shows that the fewer years of education a woman had significantly predicted poorer organization of the physical and temporal environment. Although the Withdrawal z -score was not a significant predictor in this equation ($p < .15$), it was in the predicted direction.

Table 5

Direct Multiple Regression Predicting Emotional and
Verbal Responsivity of the Mother

Variable	r	sr ²	Beta	t
Years Education	.24	.00	.05	.28
Withdrawal	-.29	.17	-.48	-2.49*
Aggression	-.44	.23	-.52	-2.93**
Daily Stress	.02	.05	-.26	-1.40

R = .62, F(4,23) = 3.50, p < .05

Note. t < .10 * < .05 ** < .01 *** < .001

Table 6

Direct Multiple Regression Predicting Organization of the
Physical and Temporal Environment

Variable	r	sr ²	Beta	t
Years Education	.45	.18	.46	2.45*
Withdrawal	-.36	.07	-.31	-1.51
Aggression	.10	.02	.17	.92
Daily Stress	.08	.02	-.16	-.82

R = .57, F(4,23) = 2.72, p < .05

Note. t < .10 * < .05 ** < .01 *** < .001

In the regression analysis predicting Provision of Appropriate Play Material, Occupational Status was added as a fifth predictor variable (see Table 7) because income may be an important factor predicting ability to provide toys. Examination of the analyses indicates that the regression equation is significant, $R = .61$, $F(5,22) = 2.62$, $p < .05$. It appears that the more withdrawn a mother was as a child the less she tended to provide appropriate play materials for her child. Occupational Status was in the predicted direction but it did not reach significance ($p < .06$).

The three other regression analyses that were not significant were those predicting Avoidance of Restriction and Punishment, Opportunities for Variety in Daily Stimulation, and finally, Maternal Involvement.

In general, the results support the hypothesis that the mother's childhood social behaviour, her educational status, and her current level of functioning would be important in predicting her behaviour as a parent. Aggression and withdrawal were both significant predictors of specific aspects of the home environment. Withdrawal, however, entered into more of the equations. That is, the mother's childhood withdrawal z -score predicted the quality of the Overall HOME environment as well as the mother's Emotional and Verbal Responsivity to her child, and the Provision of

Table 7

Direct Multiple Regression Predicting Provision of
Appropriate Play Material

Variable	r	sr^2	Beta	t
Years Education	.26	.03	.22	1.10
Withdrawal	-.40	.14	-.45	-2.19*
Aggression	-.22	.05	-.24	-1.32
Occupational Status	-.14	.11	-.37	-1.96t
Daily Stress	.35	.01	.08	.42

$R = .61$, $F(5, 22) = 2.62$, $p < .05$

Note. $t < .10$ * $< .05$ ** $< .01$ *** $< .001$

Appropriate Play Material. Aggression predicted the Emotional and Verbal Responsivity of the mother. The other variable that was important in predicting the home environment was the number of Years of Education the mother had. Education was important for the Overall HOME environment as well as several of the subscales of the HOME.

Prediction of Child Outcome

The second hypothesis concerned the prediction of outcome for the children of the mothers. It stated that the mother's childhood social behaviour, the mother's age at pregnancy, and the mother's parenting behaviour would be important in the prediction of child outcome.

Intercorrelations were performed between the number of items failed for each of the DDST developmental realms in order to determine if the subscales were interrelated. These correlations indicated that the more items in the Gross Motor area a child failed, the more items pertaining to Fine Motor development he or she failed, $r(37) = .41, p < .01$ and Language, $r(37) = .36, p < .05$ (see Appendix P). None of the other correlations were significant.

The second hypothesis was investigated using the direct multiple regression technique. The Overall number of Failures on the DDST served as the dependent variable. The predictors included Mother's Aggression and Withdrawal z -

scores in childhood, Mother's Age at the time of Pregnancy, the Age of the Child, and the Overall HOME environment z-score for all 38 subjects. The multiple correlation was significant, $R = .74$, $F(5,32) = 7.81$, $p < .0001$ (see Table 8). Tables 8 through 11 contain the zero-order correlations, the squared semi-partial correlations, the standardized beta weights, and the t and p values for each of the five predictor variables (Mother's Age at the time of Pregnancy, the Overall HOME environment, the Child's Age, Withdrawal z-score, and Aggression z-score). All of the variables entered into the equation were significant predictors, except for the mother's Withdrawal z-score. That is, the more aggressive a mother was in childhood, the younger she was at the time of pregnancy, the poorer the home environment was, the more items the child failed overall. The age of the child was also significant. The correlation indicates that the older the child was at the time of testing the more items he or she failed. Because of the confound of the number of items administered and the age of the child, the correlation cannot be interpreted. In general, the findings support the hypothesis, except for the finding that the mother's Withdrawal z-score did not significantly predict child outcome.

The results also indicate that Mother's Age at

Table 8

Direct Multiple Regression Predicting Overall Failure of
Items in the Child's Overall Development

Variable	r	sr ²	Beta	t
Age at Pregnancy	-.14	.09	.42	2.55**
Aggression	.23	.07	.34	2.25*
Withdrawal	-.11	.01	-.14	-.99
Home Environment	-.19	.10	-.36	-2.64**
Age of Child	.62	.44	.72	5.57***

R = .74, F(5,32) = 7.81, p < .0001

Note. t < .10 * < .05 ** < .01 *** < .001

Pregnancy is a suppressor variable. A suppressor variable is one which is heavily weighted but not because it directly predicts the dependent variable, but because it suppresses irrelevant variance in the other independent variables (Tabachnick & Fidell, 1983). One way a suppressor variable can be recognized is if the simple correlation and the beta weight have opposite signs and the beta weight is significantly different from zero. To interpret a suppressor variable, one can re-run the regression analyses, systematically removing each of the other independent variables, and examining the changes in the beta weights of the suppressor variable. When this was conducted, it was apparent that the irrelevant variance that Mother's Age at Pregnancy was suppressing, and therefore increasing the multiple correlation, was associated with its relationships with the Aggression z -score and the Child's Age ($r = -.58$ and $r = -.36$, respectively). The shared variance between these three variables is most likely that which is being suppressed.

Since the regression equation examining the prediction of the Overall number of developmental items failed by a child was significant, separate regression analyses were run on the number of failures in each of the four DDST components separately (Personal/Social, Language, Fine

Motor, and Gross Motor) in order to determine which aspects of development were associated with the predictor variables.

Tables 9 through 11 illustrate three of the four regression analyses performed (one was not significant). First, the number of failures in the Social/Personal realm was significantly predicted by the five variables, $R = .61$, $F(5,32) = 3.85$, $p < .01$ (see Table 9). Three of the variables were significant predictors: the more aggressive the mother was as a child and the younger she was at the time of pregnancy predicted failures in the Social/Personal realm. Age of the child at the time of testing was also a significant predictor.

The second equation significantly predicted the number of failures in the Gross Motor domain of development, $R = .56$, $F(5,32) = 2.89$, $p < .05$ (see Table 10). The poorer the home environment was the more Gross Motor items a child failed. Again, age of the child at the time of testing was also a significant predictor.

The third finding concerned the prediction of failed items in the Fine Motor sphere of development, $R = .62$, $F(5,32) = 3.91$, $p < .01$ (see Table 11). The poorer the home environment was and the younger the mother was at pregnancy (as well as age of the child) significantly predicted failures in the Fine Motor area of development.

Table 9

Direct Multiple Regression Predicting Failures in the
Social-Personal Realm

Variable	r	sr ²	Beta	t
Age at Pregnancy	-.12	.10	.43	2.21*
Aggression	.38	.19	.56	3.11**
Withdrawal	-.10	.00	-.02	-.15
Home Environment	-.07	.03	-.19	-1.15
Age of Child	.41	.20	.49	3.23**

$R = .61, F(5,32) = 3.85, p < .01$

Note. t < .10 * < .05 ** < .01 *** < .001

Table 10

Direct Multiple Regression Predicting Failures in the
Gross Motor Realm

Variable	r	sr ²	Beta	t
Age at Pregnancy	-.20	.01	.10	.49
Aggression	.08	.00	.07	.39
Withdrawal	.08	.00	.00	.01
Home Environment	-.30	.09	-.34	-2.01*
Age of Child	.45	.20	.49	3.06**

R = .56, F(5,32) = 2.89, p < .05

Note. t < .10 * < .05 ** < .01 *** < .001

Table 11

Direct Multiple Regression Predicting Failures in the
Fine Motor Realm

Variable	r	sr^2	Beta	t
Age at Pregnancy	-.01	.09	.42	2.16*
Aggression	.19	.04	.27	1.52
Withdrawal	-.37	.10	-.37	-2.27*
Home Environment	.09	.02	-.17	-1.04
Age of Child	.42	.21	.50	3.27**

$R = .62, F(5,32) = 3.91, p < .01$

Note. $t < .10$ * $< .05$ ** $< .01$ *** $< .001$

The last regression analysis predicting development in the Language realm was marginal in significance.

In general, the findings supported the hypothesis. All of the variables were important in predicting failure of items of various developmental tasks. Aggression significantly predicted the Overall number of Failures as well as failures in the Personal/Social realm of development. The mother's age at pregnancy was important when examining the Overall Failure of items, as well as failures in the Personal/Social and the Fine Motor realms of development. Mother's age at pregnancy was also important by acting as a suppressor variable for the mother's childhood Aggression z -score and the Child's Age.

The age of the child significantly predicted the overall number of failures, and performance in the personal/social, gross and fine motor realms of development. In all cases, the older the child was at the time of testing the more items he or she failed. This may be due to the methodological problem discussed earlier with respect to the Denver. As a child gets older the number of items that he or she could fail increases. That is, there is the possibility that a five year old for example, could fail items identified as four and three year old items whereas a two year old only has one year old items that he could fail

(see Appendix N1).

Although it is not possible to tease out what is really responsible for contributing to the significance of the age of the child variable, it does appear that the older children are having more problems and that this finding is not necessarily an artifact of the test material.

The Overall HOME environment was important for the Overall number of Failures and the Number of items failed in the Gross Motor realm of development. In contrast with Aggression, Withdrawal was only important for the prediction of the child's fine motor development, and this relation was in the opposite direction than expected. That is, the more withdrawn a mother was as a child, the better the fine motor skills her child had.

Because the mother's childhood withdrawal z -score was predictive of many areas of the home environment, it was curious as to why it did not predict more in terms of child outcome. It is possible that since withdrawal was predictive of the overall home environment and both of these variables were entered as predictors of child outcome in the regression analyses, that the variance shared between them was being pulled by the home environment variable as opposed to the withdrawal variable. However, another set of regression analyses predicting the five DDST outcome

variables was performed without the home environment variable (i.e., Aggression and Withdrawal z-scores, Age of the Child, Age of the Mother at Pregnancy), and the results did not fully support this interpretation. The only dependent variable that changed was the performance by the children in the gross motor area of development. That is, the more withdrawn the mother was as a child the more items the child failed in this area.

Because the new regression analyses did not fully support the interpretation, other explanations were sought. The Overall Home environment was also significantly predicted by the number of Years of Education the mother had. This variable was entered into another set of regression analyses (again predicting the five DDST outcome variables) with the following predictors: Years of Education, Aggression and Withdrawal z-scores, Age of the Child, Age of Mother at Pregnancy). The results of the analyses were no different than the previous regression analyses. Finally, when the mother's Withdrawal z-score was excluded from the analyses (i.e., Aggression z-score, Overall Home environment z-score, Years of Education, age of the Child, and Mother's Age at Pregnancy), no differences from the previous analyses were found.

The results indicate that the level of the mothers'

childhood withdrawal does not directly impact upon the child's development as much as the level of the mothers' childhood aggression. It is clear that this finding is not due to the withdrawal z-scores' relationship with other variables such as education, home environment, and aggression. With the exception of the offsprings' personal/social development, mothers' childhood withdrawal z-score primarily predicts quality of the home environment. The home environment, in turn, is related to offspring development.

Discussion

The focus of this study was on factors within the family context through which risk may be transferred from one generation to the next. Two hypotheses were proposed: First, the mother's childhood social behaviour, her educational status, and her current level of functioning would be important in predicting her behaviour as a parent, which would be reflected in the quality of the home environment she provided for her child. Low education, low occupational status, high stress, and high childhood aggression or withdrawal were expected to be negative predictors of the adequacy of the mother's parenting skills and the quality of the home environment as measured by the HOME inventory. The second hypothesis stated that mother's social behaviour in childhood, mother's age at pregnancy, and mother's parenting behaviour would be important in the prediction of child outcome. Specifically, the more aggressive or withdrawn the mother was as a child, the poorer the home environment she would provide, the younger she was at the time of pregnancy, the greater the probability that the child would show developmental problems.

It must be emphasized at the outset that, although the sample size was adequate for the statistical tests used, one should still be somewhat cautious in drawing any strong

conclusions. This caution would be particularly important with respect to any results which would not have been expected based on the previous literature. To the extent that the pattern of the significant results is consistent with expectations based on previous research and theories of risk and vulnerability, one can be more confident interpreting the findings.

The results confirmed both hypotheses. The regression equations indicated that mother's low education level, high aggression z -scores during the mother's childhood, and high childhood withdrawal z -scores, predicted a lower quality of home environment, including both the overall score and specific subscales. The mother's age at pregnancy, high childhood aggression z -score, high childhood withdrawal z -score, poor quality of home environment, and the child's age at the time of testing, predicted failures in specific developmental areas and in the total number of failures on the developmental screening test.

When the results are examined together, it appears that there are a number of variables which are important in the transfer of risk status from mother to child. Some of them, such as mother's education level, mother's age at pregnancy, and quality of home environment, have previously been shown to be important predictors of developmental status. This

study has replicated the literature, using a sample of women who had been peer-identified during childhood as being socially atypical. The present study also addresses two issues that past research has not explored: whether a woman's childhood aggressive or withdrawn behaviour is related to her behaviour as a parent (i.e., ability to provide a good home environment), and whether a woman's childhood aggressive or withdrawn behaviour is related to the developmental progress of her child.

Results Pertaining to Withdrawal

The results clearly indicate that aggressive and withdrawn behaviour in childhood are related to a woman's parenting behaviour (i.e., specifically her responsiveness and general ability to provide a stimulating home environment). Of the two childhood social dimensions, withdrawn behaviour appears to have the stronger relation to parenting and home environment. The more withdrawn the mother was in childhood the lower the overall home environment score. Women who were highly withdrawn in childhood are less responsive to their children and provide fewer appropriate play materials for them than the other women in the study. Those women who were withdrawn as children either do not provide appropriate toys for their children or provide fewer or uni-dimensional (e.g., all

cuddly) toys.

Mothers who were withdrawn as girls also tend to talk to their children less, touch and kiss them less, praise them less, and gain less positive feeling or pleasure from them than the other women in the study. A child might interpret his or her mother's lack of responsiveness by feeling "unworthy" of their mother's attention, which may lead to a lack of self-confidence, low self-esteem, and insecurity in the child.

The results suggest that the withdrawal z-score has a direct effect on the quality of the home environment. Given that education also significantly predicted the quality of the home environment in the present study, and that previous research has shown that education is a predictor of parenting behaviour and home environment, some may argue that the route through which the withdrawn behaviour is having its impact is through the low education status of these women. This interpretation is probably incorrect for two reasons. First, the education and withdrawal variables would not both be such strong predictors in the regression equations if education were the significant factor (i.e., would not both be accounting for a high degree of variance). Second, it has been found that those children who were rated as highly withdrawn did not differ in intelligence from

those children who were low on the dimensions of aggression and withdrawal (Moskowitz & Schwartzman, 1989). It has also been found that women who were withdrawn as children do not have a low education status (Schwartzman et al., 1990). Withdrawal must have a separate and direct effect on the quality of home environment from education. In other words, there is something specific about being rated as withdrawn in childhood in terms of providing a good home environment.

The mothers' childhood withdrawal z -scores are also related to child development. The results show that it significantly predicted the number of items a child failed in the development of fine motor skills. Contrary to what was predicted, the more withdrawn the mother was as a child the fewer number of fine motor items her child failed. It has been shown that mothers who were rated as withdrawn in childhood tend to remain withdrawn (Moskowitz, 1990). These women may stay at home where their activities are centered. If they have any hobbies that require fine motor skills, they may impart some of their knowledge to their children and help their children with similar types of tasks.

Another interpretation involves the possible lack of experience withdrawn individuals have with others. A mother who was withdrawn as a child may not understand that peer play is important for child development. The offspring of

mothers who were withdrawn in childhood may involve themselves with more solitary play activities, thereby increasing their fine motor skills.

Although the mother's childhood withdrawal z -score only significantly predicted the number of failures in the fine motor area of development, there was one child of a mother who was highly withdrawn in childhood who failed many items (8 items) in another realm of development. Of the eight items that this child failed, five of them were in the social realm of development indicating that there may be other repercussions of mother's childhood social withdrawal.

In summary, it appears that women who were rated as withdrawn as children may have grown up in a less stimulating environment, due to their withdrawal from people and activities. They may also have learned to be more involved with themselves ("internal events") as opposed to others ("external events"), including their own children. Not "knowing" that children should be provided with appropriate play materials and not "knowing how" to respond and interact with others (i.e., lack of interpersonal and social skills), may create a less stimulating environment for a child.

It appears that being withdrawn as a child is a predictor of the type of home environment a mother is able

to create. It is unclear, however, what it is about being withdrawn in childhood that affects the type of home environment these women provide. It may simply be that they have a limited experience and knowledge about their environment in general, and thus, do not know what is needed and what is available for children. Further, being withdrawn may limit the types of interactions they have with others, including their children. This interpretation may be grounded in the finding that girls who were withdrawn in childhood grew up to have anxiety problems, including social and simple phobias (Schwartzman et al., 1990). As a result, they may have a difficult time participating in social interactions, even with their children. Future studies should examine the current social behaviour pattern of women who were withdrawn in childhood to see whether this style of behaviour persists into adulthood, and characterizes their mode of interaction with their children.

In terms of how withdrawn behaviour may affect the development of the offspring of these women, the results indicate that the path may be an indirect one as opposed to a direct one. That is, women who were considered withdrawn as children tend to furnish their offspring with a poor home environment and a poor home environment is related to a higher number of failures on developmental tests.

Results Pertaining to Aggression

Although aggression in childhood did not play as significant a role as withdrawal in predicting parenting behaviour, it was also related to this outcome measure. One finding that did emerge was that women who were rated as aggressive in childhood were not very responsive, emotionally or verbally, to their children. As with the women who were rated as withdrawn in childhood, women who were aggressive in childhood tend to talk to their children less, touch and kiss them less, praise them less, and gain less positive feeling or pleasure from them than the other women in the study. Women who were rated as aggressive in their childhood may not have the interpersonal skills needed to interact with others, and most importantly, with their own children. They may also model behaviour that is inappropriate. The child may then imitate this behaviour and incorporate it into his or her own behaviour repertoire.

The mother's childhood aggression z -score was also related to child outcome, more so than the mother's childhood withdrawal z -score. High aggression scores significantly predicted the overall number of failures on the DDST, and particularly, failures in the personal-social realm of development. The more aggressive the mother was as a child the more items her child failed. As discussed

above, a woman who was rated as aggressive in childhood may lack social and interpersonal skills, have a low IQ score, and a low education level. As a result, her interactions with her child may be qualitatively and quantitatively poorer than a woman who was less aggressive. A woman who was aggressive in childhood may model behaviour which does not teach appropriate personal-social behaviour.

Of the three children who failed the most items on the DDST, two had mothers who were highly aggressive in childhood (failed 6 and 9 items). In fact, 62.5% (5 out of 8) of children from those women who were highly aggressive in childhood failed at least two items on the Denver.

In summary, aggression appears to be related to the home environment and the development of offspring in a different manner than withdrawal. Aggression does not seem to be as central to the provision of a stimulating home environment, at least as measured by the HOME inventory. However, it is related to the interaction between mother and child as measured by the emotional and verbal responsiveness subscale. It is also related to child outcome more directly than withdrawal appears to be. Withdrawal seems to be directly important for the quality of home environment and indirectly to child outcome through the home environment; while aggression seems to be more directly important to

child development.

Further Directions for Research

The present study suggests that both childhood aggression and withdrawal are important in terms of parenting behaviour and child development. It also suggests some possible mechanisms through which the mother's risk status is transferred to her offspring (i.e., lack of skills, less parenting knowledge, quality of interpersonal interactions, lack of responsiveness to child). Because of the small sample size, this study needs to be replicated with a larger sample. In addition, future research needs to focus on a number of other issues: First, because both aggression and withdrawal in childhood suggest inappropriate social interactions, it is of utmost importance to examine mother-child interactions in order to determine more clearly the process through which risk is transferred from mother to offspring. For example, do women who were aggressive in childhood interact with their children in a different manner than women who were withdrawn in childhood? And, if so, how do they differ and how are they interacting with their children?

The present study suggests that women who were aggressive or withdrawn in childhood do differ in their interactions with their children. However, the specifics of

the interactions are still unknown. It would be important to observe mother and child in both structured and unstructured situations to gain access to different types of interactions. The observations of mother-child interactions might also yield useful information regarding the functioning of the child.

Second, the inclusion of a more specific measure of child development is essential because the DDST is a gross measure of developmental abilities. Because other studies have typically utilized intelligence as an outcome measure for children, and because IQ can predict later academic achievement, an intelligence test would be an important measure to include (i.e., Bayley, Stanford-Binet, McCarthy, Kaufman, WPPSI-R, and WISC-R).

Third, it would be of interest to determine whether women who were rated as aggressive or withdrawn in childhood, continued to show these tendencies in adulthood. As mentioned earlier, Moskowitz's (1990) findings suggest that both aggression and withdrawal remain stable as a child gets older. One question which should be addressed is whether women who have retained their childhood status into adulthood have offspring who are functioning more poorly than the offspring of women whose status has improved.

Fourth, it would also be of interest to measure the

child's social and behavioural competence (e.g., Achenbach Child Behaviour Checklist, California Pre-school Inventory) because, if the mother is interacting inappropriately with her child, or she is modelling inappropriate behaviour, the child may also be manifesting inappropriate behaviour.

Fifth, it would be of great interest to determine the child's status according to his or her peers. That is, it would be informative to have elementary school-age peers evaluate the offspring of highly aggressive or withdrawn mothers on the PEI. Just as the mothers were evaluated when they were children, this information could yield important information as to the offsprings' future. Offspring may be rated similar to their mothers, or may exhibit other types of psychosocial problems.

Sixth, although the present study focused on women and mothering, males may also be capable of transferring their risk status to their offspring. It would be interesting to examine a group of males who were rated as aggressive or withdrawn in childhood and determine if their high risk status was transferred to their offspring. If so, is the transferral process similar to that of the mothers's? Fathers are an important factor in a child's life, regardless of childhood status. Caplan and Hall-McCorquodale (1985) for example, have criticized literature

on child development for examining only the mother's influence on the child, while the father's contribution is seldom considered. They suggest that mothers should not be held solely responsible for the child's development.

Seventh, within two-parent families, the spouses of the target subjects (be they male or female) should be included in future studies. The spouse has the potential to act as a buffer, or a facilitator, of problems between the target subjects and their offspring. As Margolin (1981) suggests, there are reciprocal relationships between mother-child, father-child, and mother-father and they impact on each other. Although some measures such as the HOME, are designed to be completed by mothers, fathers could also complete the measures and the two results could be compared.

Finally, it would also be important to examine other variables that were included in the present study but were dropped because of sample size, such as child's temperament, obstetrical complications, mother's concept of child development, and maternal psychopathology.

Implications

Some of the findings that were not statistically significant (e.g., the three children who failed the most items were from mothers who were either highly aggressive or withdrawn) are nevertheless clinically relevant. There are

certain children from the high risk end of the sample who are already having developmental problems. If this process is not intervened upon, these children are likely to continue having problems into adolescence and adulthood.

If the findings in this study are confirmed with larger samples, there are important implications for prevention and intervention. It has been well established that education (i.e., keeping adolescent girls in school and providing them with the necessary skills to obtain further education and/or vocational employment) is the single most important "buffer" for the offspring of teenage mothers (Furstenberg et al., 1987).

In addition, this study points to further prevention and intervention strategies. Since childhood aggression and withdrawal were significant predictors of both home environment and child outcome, attention should be focused on those girls who display these types of behaviour when they are young. Although one should consider the possible side effects of labelling a child, the present study indicates that there may be some justification for providing special programs targeted at these girls to deal with their behaviour. Girls who display high levels of aggression, relative to other girls, may require social support and social skills training to gain new strategies and ways of

interacting with others.

Childhood withdrawal seems to be a difficult behaviour pattern to detect in girls because these girls are usually seen as quiet and non-disruptive, which fits the stereotypic feminine role (Serbin et al., in press). Since these girls develop problems later on and provide less adequate home environments for their children, they need to be identified. They may require support and intervention that focuses on specific problems such as anxiety (Quay & LaGreca, 1986; Kellam et al., 1987; Schwartzman et al., 1990). If they do become parents, they may require parent training and social support.

In conclusion, this study suggests that both childhood aggression and withdrawal have implications for parenting behaviour, and subsequently, for child outcome. The results demonstrated that developmental history adds a dimension to prediction beyond the factors that had been previously identified. The study also suggests that the processes of high risk transferral may be different for the dimensions of childhood aggression and withdrawal. Prevention and intervention for young women who are highly aggressive or withdrawn in childhood, and for their offspring, will be an important subject for future research.

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Appendix A and A1
French Version of the Pupil Evaluation Inventory
and
English Version of the Pupil Evaluation Inventory

Pupil Evaluation Inventory

1. Ceux qui agissent plus jeunes que leur âge.
2. Ceux qui aident les autres.
3. Ceux qui ne sont pas capables de rester assis tranquilles.
4. Ceux qui essaient de mettre les autres dans le trouble.
5. Ceux qui sont trop timides pour se faire des amis facilement.
6. Ceux qui se sentent trop facilement blessés.
7. Ceux qui prennent des airs supérieurs et qui pensent qu'ils valent mieux que tout le monde.
8. Ceux qui font les clowns et font rire les autres.
9. Ceux qui commencent la chicane à propos de rien.
10. Ceux qui ne semblent jamais s'amuser.
11. Ceux qui sont bouleversés quand ils ont à répondre aux questions en classe.
12. Ceux qui disent aux autres enfarts quoi faire.
13. Ceux qui sont d'habitude les derniers choisis pour participer à des activités de groupe.
14. Ceux que tout le monde aime.
15. Ceux qui s'empêtrent tout le temps et se mettent en difficultés.
16. Ceux qui rient des gens.
17. Ceux qui ont très peu d'amis.
18. Ceux qui font des choses bizarres.
19. Ceux qui sont vos meilleurs amis.
20. Ceux qui ennuient les gens qui essaient de travailler.
21. Ceux qui se mettent en colère quand ça ne marche pas comme ils veulent.
22. Ceux qui ne portent pas attention au professeur.
23. Ceux qui sont impolis avec le professeur.
24. Ceux qui sont malheureux ou tristes.
25. Ceux qui sont particulièrement gentils.
26. Ceux qui se comportent comme des bébés.

27. Ceux qui sont méchants et cruels avec les autres enfants.
28. Ceux qui souvent ne veulent pas jouer.
29. Ceux qui vous regardent de travers.
30. Ceux qui veulent faire les fins devant la classe.
31. Ceux qui disent qu'ils peuvent battre tout le monde.
32. Ceux que l'on ne remarque beaucoup.
33. Ceux qui exagèrent et racontent des histoires.
34. Ceux qui se plaignent toujours et qui ne sont jamais contents.
35. Ceux qui semblent toujours comprendre ce qui se passe.

Pupil Evaluation Inventory

1. (Example question).

Aggression Items

3. Those who can't sit still.
4. Those who try to get other people into trouble.
7. Those who act stuck-up and think they are better than everyone else.
8. Those who play the clown and get others to laugh.
9. Those who start a fight over nothing.
12. Those who tell other children what to do.
15. Those who always mess around and get into trouble.
16. Those who make fun of people.
18. Those who do strange things.
20. Those who bother people when they're trying to work.
21. Those who get mad when they don't get their way.
22. Those who don't pay attention to the teacher.
23. Those who are rude to the teacher.
26. Those who act like a baby.
27. Those who are mean and cruel to other children.
29. Those who give dirty looks.
30. Those who want to show off in front of the class.
31. Those who say they can beat everybody up.
33. Those who exaggerate and make up stories.
34. Those who complain nothing seems to make them happy.

Withdrawal Items

5. Those who are too shy to make friends easily.
6. Those whose feelings are too easily hurt.
10. Those who never seem to be having a good time.
11. Those who are upset when called on to answer questions in class.

13. Those who are usually chosen last to join in group activities.
17. Those who have very few friends.
24. Those who are unhappy or sad.
28. Those who often don't want to play.
32. Those who aren't noticed much.

Likeability Items

2. Those who help others.
14. Those who are liked by everyone.
19. Those who are your best friends.
25. Those who are especially nice.
35. Those who always seem to understand things.

Appendix B

Brief Telephone Interview

BRIEF TELEPHONE INTERVIEW (Questionnaire # 1)

BTI-I

[1^{er} contact: Histoire du S]

BTI fait en _____ minutes Intervieweur(e) _____
Date: ____/____/____
(Jr/Mois/An)

(NOTES: Ce qui apparaît entre () ou [] est soit un commentaire s'adressant à l'intervieweur(e), soit des questions additionnelles s'adressant au sujet s'il demande des explications ou si sa réponse n'est pas claire.

Autant que possible: Ne pas mentionner le sexe du conjoint, pour ne pas brusquer les homosexuels. On peut utiliser "ami" sans ajouter "elle" ou "lui" après.]

De plus, ce qui apparaît entre {}, dans la marge de gauche, se rapporte au PAS.

Aussi, quand il y a seulement 1 et 2 comme réponses possibles, le 1 = Oui et le 2 = Non, toujours. Si c'est 1, 2, 3 ou 4: ils sont clairement définis.)

1. INTRODUCTION: Bonjour, puis-je parler à _____ S.V.P.?

Mon nom est _____ de l'Université Concordia. Je travaille pour le projet "L'individu dans son milieu".

J'aimerais prendre quelques minutes de ton temps pour t'expliquer la raison de mon appel, est-ce possible présentement?

1=OUI 2=NON 3=Rappeler le _____ vers _____ H _____

Comme tu le sais peut-être, le but de notre projet est d'étudier comment les jeunes s'adaptent dans leur milieu de vie au Québec. On est spécialement intéressé par tout ce qui touche le fait de devenir un adulte. Pour étudier l'étape de la transition entre l'adolescence et l'âge adulte, on aimerait que tu répondes à quelques questions par téléphone. Je te signale que l'information que tu me donnes demeure absolument confidentielle. Ça devrait prendre à peu près 15-20 minutes de ton temps. S'il y a une question qui ne s'applique pas à toi, dis-moi-le. Est-ce que ça te va?

2. AGE, TÉLÉPHONE, ADRESSE:

Pour commencer, quelques détails techniques: Quel âge as-tu maintenant?
_____ ans

2.1 Y a-t-il un autre numéro de téléphone où l'on peut te rejoindre?

1 = OUI: _____ Lien avec la personne: _____
2 = NON

No de téléphone au travail: _____ - _____

Ton # de tél. principal est au nom de qui, dans le botin téléphonique?
 (Prendre nom complet, le lien et l'écrire sur la fiche aussi)

2.2 Es-tu toujours à: (donner l'adresse sur la fiche)? 1 = OUI
 2 = NON

(Nouvelle adresse): _____

Code postal _____

Si "": Quelqu'un de la famille reste-il encore à l'ancienne adr.?
 Qui? _____

2.3 Occupation actuelle du père: _____
BE PRECISE! SES _____

2.4 Occupation actuelle de la mère: _____
 SES _____

2.5 Tes parents, eux, sont: 1 = Encore ensemble 2=Séparés/divorcés
 3 = Mère décédée 4=Père décédé
 5 = Les 2 décédés

1 5: _____ Depuis 19 _____ 1 5: _____ Depuis 19 _____

Si le parent a un nouveau conjoint, demander son travail:
 SES _____

3. ÉTAT CIVIL, PARENTS, ENFANTS:

[Note: Conjoint(e) signifie ds les sections 3 à 6: qui vivent ensemble ou mariés]

3.1 A) Ton état civil?	B) Lieu de résidence?	A & B=Depuis?
1 = Marié(e)	1 = [N/A]	_____ 19 _____
2 = Séparé/ divorcé	2 = [N/A]	_____ 19 _____
3 = Célibataire	3 = Son appart./Sa maison	_____ 19 _____
4 = En vie de couple	4 = [N/A]	_____ 19 _____
5 = [Not applicable: N/A]	5 = Chez le(s) parent(s)	_____ 19 _____
6 = [N/A]	6 = Foyer de groupe	_____ 19 _____
7 = [N/A]	7 = En détention	_____ 19 _____
8 = [N/A]	8 = En famille d'accueil	_____ 19 _____
9 = Prêtre, frère, soeur	9 = En communaute	_____ 19 _____

C) Pour en connaître plus sur les différences d'âge dans les familles, on aimerait avoir le nom et la date de naissance des membre de ta famille (immédiate) et des autres personnes avec qui tu as pu vivre. [Même la famille adoptive, personne décédée, demie-fratrie, nouveau conjoint(e) du parent avec qui S vit, etc.] On commence par ton père: son nom, au complet, c'est ...[pour mettre nos dossiers à jour]

PRÉNOM & NOM:	LIEN:	DATE DE NAISS.:
_____	Père _____	_____ 19 _____
_____	Mère _____	_____ 19 _____

Nom de fille _____

19 ____

3.2 TOUS As-tu des enfants ? 0 1 2 3 (et +)

3.3 Si OUI: Nom + sexe + date de naissance de chacun + nom du conjoint

a, b, c) Prénom : _____ 1 = F 2 = M Nom: _____
J: ____ M: ____ A: 19 ____

d) Nom du conjoint actuel: _____

3.4 Ton (tes) enfant(s) demeure(nt)-il(s) avec vous ?

1=OUI 2=NON avec qui? _____
Depuis ____ 19 ____

(S'il y a lieu) Tuteur légal et lien: _____

3.5 [~~Même les hommes~~] Attends-tu un enfant ? 1=OUI 2=Peut-être 3=NON

4. ADAPTATION:

4.1 Comment vont les choses pour toi ces temps-ci? (C6)

4.2 Qu'est-ce que tu fais ces temps-ci?

5. ÉTUDES, TRAVAIL ET FINANCES:

5.1 Travailles-tu ou es-tu aux études présentement?

1 = Travaille seulement 2 = Etudie seulement
3 = Travaille et étudie 4 = Ne travaille ni n'étudie:-->
depuis? ____ mois

(C2) [Si le sujet étudie]: Niveau _____ Domaine _____
Temps plein: 1=Oui 2=Non

<u>Niveau:</u>	<u>Année:</u>	<u>Domaine:</u>
Primaire	1 @ 6	
Secondaire	1 @ 6	[Rég. (5 ans), Profess. court (4 ans:P.C.) Profess. long (6 ans)]
Cégep & Bacc.	1 @ 3	[Cégep -> Progr. pré-univ. ou techn. <u>et</u> spécifier le domaine (ex.:Sciences. Bacc.-> informatique, psycho.,etc.)
Maîtrise & Doct.	1 2	[Informatique, psycho., etc.]

TOUS

5.2A) Quelle est la dernière année de scolarité que tu as complétée?
Niveau, année _____

{C1} Dans quel domaine: _____
Année complétée: En 19 _____

Diplôme obtenu? 1=OUI 2=NON Raison:

As-tu l'intention de continuer tes études après (plus tard)?
1=OUI: Niveau _____ Domaine _____
2=Peut-être 3=NON

Conjoint(e): Sa scolarité : Niveau, année _____
Domaine _____

{C4} B) [Si le S a laissé durant l'année scolaire actuelle]:
Quel mois? _____ = # de mois d'étude: _____

{A4} TOUS -> Aimes-tu ça, aller à l'école? 1=Cui 2= +/-
3=Non _____

C) [Si le S étudie présentement:] (Voir note à 5.1 pour BTI fait en été)

Maintenant, dans les derniers résultats que tu as reçus à l'école:

{A3} Par rapport aux élèves de ta classe, tu te classais ...
[Énumérer -->]
1=Au-dessus de la moyenne (X) 2=Dans la X 3=En-dessous de la X

As-tu coulé des cours à la dernière session (au dernier trimestre)? _____
cours

{C2} Comment t'entends-tu avec la majorité des profs? 1=Bien 2= +/-
3=Mal

{A4} Avec les autres étudiants en général ? 1=Bien 2= +/- 3=Mal _____

Combien d'heures/semaine tu foxais, en moyenne (sautais des cours)?
_____ h.

[Pour les prochaines questions, utiliser les codes suivants:]

(0=jamais 1=rarement 2=quelques fois 3=souvent 4=très souvent)
As-tu eu des problèmes de discipline ? (0 --> 4) _____

En avais-tu, les années d'avant? [Probl. de discipline] (0 --> 4)

5.3 Travail du sujet: Dans quel domaine? [Le plus détaillé possible]

{C5} _____

1 = Temps plein (30 heures et plus) 2 = Temps partiel: _____
heures par semaine

5.4 Depuis quand travailles-tu là? (_____) = _____ 19 _____
(C2-4)

5.5 [Si le S n'étudie pas à plein temps présentement (Voir 5.1)]:

Quelles autres jobs as-tu faites depuis la fin des études (+ écrire durée pour chacune + temps plein ou partiel + durée du chômage ou de l'aide sociale):

(C2-4)

5.6 SES actuel du sujet: Occupational _____
Prestige _____

5.7 Conjoint(e): Travail actuel: _____ SES _____

5.8 [Si travaille, ou a travaillé pendant les 6 derniers mois: T. plein ou partiel]

Maintenant, des petites questions sur ton travail actuel (dans les 6 derniers mois)

OU sur le dernier travail que tu as fait dans les 6 derniers mois:

{C6} Comment ça va à l'ouvrage? (Aimes-tu ça?...) 1=bien 2= +/-
3=Mal _____

Comment t'entends-tu avec le boss (superviseur) la plupart du temps?
1=bien 2= +/- 3=Mal

Avec les autres employés en général? 1=bien 2= +/- 3=Mal

Combien de jours par mois tu manques volontairement en moyenne?

_____ jours/mois

5.9 TOUS: Bon, on va parler FINANCES maintenant:

Comment ça va sur le plan financier? 1=bien 2= +/- 3=Mal _____

(C5-6)

Y a-t-il quelqu'un qui te donne un coup de main financièrement?
1=Oui 2=Parfois 3=Non (Si 1 ou 2: Sous quelle forme?)

(Si 1 ou 2: Que payes-tu avec cet argent?) _____

(Si vit chez parenté) Aides-tu à payer les dépenses de la maison?
1=Oui 2=Parfois 3=Non (Si 1 ou 2: De quelle façon?)

6. VIE AMOUREUSE:

Tu me disais tantôt que tu vivais avec (Voir 3.1) _____

(A5)

6.1 {B3} Si 1: MARIÉ Ou 4: EN VIE DE COUPLE: On va parler de votre vie de couple un peu. Depuis 6 mois:

Comment vous entendez-vous? (Des problèmes? Assez pour "casser de la vaisselle?" Ou pour arrêter de vs parler? Depuis quand? Raisons?>(*))
1=Bien 2= +/- 3=Mal Depuis _____ sem. Raisons(*) 1 --> 9 _____

(C6) (*) Raisons: 1 = Argent 2 = Goûts différents 3 = Caractères différents
4 = Problèmes familiaux 5 = Fidélité 6 = Côté sexuel
7 = Violence 8 = Éducation de l'enfant 9 = Autres (quoi?)

Si mariés: Avez-vs vécu ensemble avant de vous marier? _____ mois

Combien de temps êtes-vs sortis ensemble avant mariage/vie de couple _____ mois

6.2A) SI AUTRE QUE 1 OU 4: [Couvrir les 6 derniers mois AU COMPLET (Y)]

Sors-tu avec quelqu'un de "steady"? 1 =Oui 2 =Non (1 & 2):
Depuis _____ mois

{A5} Si Oui: Entente? (Problèmes ...) 1=Bien 2= +/- 3=Mal

(Si problèmes) Depuis quand? _____ sem. Raisons(*) 1->9: _____

[(Y) NOTE: Si les 6 derniers mois ne sont pas couverts: les couvrir

B) DATING--> [Si ne sort pas depuis +/- 6 mois]: Sors-tu quand même de temps en temps? 1 2 (ou c'est le calme plat ces temps-ci?) _____

Si oui: Dans ce cas-là, pendant combien de temps tu vas sortir ("dater") avec la même personne, en moyenne? _____ semaines

{B3} 6.3 TOUS:

{C6}A quel âge as-tu commencé à sortir (avec les gars/ les filles)?
_____ ans

Avec combien de personnes es-tu sorti steady en tout depuis le début?

[Ne pas demander la prochaine, si marié ou en vie de couple depuis > 1an]

Une relation steady dure combien de temps, en général, pour toi?
_____ mois

La relation steady la + longue: _____ mois

La + longue période sans sortir steady avec personne depuis le début:
_____ mois

7. SANTÉ: On va parler de ta santé, maintenant.

7.1 Au cours des 6 derniers mois, as-tu eu des problèmes de santé?

Quoi? _____ Début: _____ 19 _____ Durée: _____ mois

Cote*: _____

Quoi? _____ Début: _____ 19 _____ Durée: _____ mois

Cote*: _____

- *Cote (de sévérité du probl.): 0 = Aucune maladie, aucun problème
 1 = Maladie "moins" grave
 2 = Maladie très grave, danger pr la vie
 3 = accident, blessure...
 4 = Autre: difformités, etc.
 5 = Obstétrique, gynécologie, MTS
 6 = Maladie "mentale"
 7 = Probl. relié à la drogue &/ou à l'alcool

As-tu consulté un médecin dans les 6 derniers mois?

2=NON 1=OUI Raison: _____
 Cote _____

Combien de fois en tout (dans les 6 derniers mois)? _____

7.3 Prends-tu des médicaments? Quoi? _____ Pourquoi? _____
 Cote(s) _____

Utilises-tu un moyen de contraception? Quoi? (V) 1 9: _____
 Depuis: ____ 19 ____

(Si oui): En as-tu un autre, à part ça? (V) 1 9: _____
 Depuis: ____ 19 ____

(V) 1=Condom 3=Stérilet 5=Pilule 7=H:Opérée 9=Stérile de naiss./
 2=Mousse 4=Diaphragme 6=F:Opérée 8=Thermo./Ogino maladie/accid.

7.4 As-tu déjà été hospitalisé?

Date: _____ 19 ____ Raison: _____ Durée: _____
 Cote: _____

Autre fois: ____ 19 ____ Raison: _____ Durée: _____
 Cote: _____

(Femmes): As-tu déjà fait des fausses-couches? 1 2 Date: _____
 19 ____ 19 ____

T'es-tu déjà fait avortée? 1 2 Date: _____
 19 ____ 19 ____

Nombre total d'hospitalisations d'un jour et plus: _____

7.5 A part ce que tu viens de mentionner, as-tu eu d'autres problèmes de santé dans toute ta vie?

Dates: 19 ____ Cotes: _____
 Quoi: _____

8. MOMENTS DIFFICILES:

8.1 Au cours des 6 derniers mois, as-tu vécu des moments que tu considères difficiles ou stressants pour toi? (Par exemple, dans ta famille ou avec tes amis, ou encore à ton travail (à l'école)? 2 = Non (aller à 8.2) 1 = Oui

(C6)

A) De quels secteurs? 1 -> 9: (*)

1 = Famille 2 = Amitié 3 = Conjoint(e)
4 = Argent 5 = École 6 = Travail
7 = Mental 8 = Santé 9 = Autre _____

B) Début du prob.: _____ 19 _____ Durée: _____ semaines

C) Qu'est-ce qui a causé ça? _____

D) As-tu consulté quelqu'un pour t'aider? 2=NON 1=OUI: Qui? Quelle aide?

Personne consultée: 1 = médecin 2 = ami
3 = psychologue 4 = trav. social, éducateur spéc.
5 = prêtre 6 = parenté
7 = conseiller 8 = psychiatre
9 = autre (spécifier:) [Inclure chum/conjoint] _____

Aide reçue: 1 = thérapie 2 = hospitalisation
3 = évaluation 4 = médicaments
5 = soutien, support moral
6 = démarches légales ou autres
7 = autre (spécifier:) _____

(Si le S a parlé à quelqu'un autre qu'un ami ou parenté:
Combien de fois _____

8.2 Comment te sens-tu émotionnellement, de ce temps-ci? [Si des précisions sont demandées: Te sens-tu anxieux(se), déprimé(e), ou bien, en général?]

(C6-9)

(Note: Si la réponse est négative, utiliser les descriptions 1,2,3 suivantes et si la réponse est positive: 5,6,7.):

Dirais-tu que tes sentiments sont, en général: 1 2 3 4 5 6 7

1 :très négatifs 2 :moyennement négatifs 3:légèrement négatifs
4 :neutres
5 :légèrement positifs 6 :moyennement positifs
7 :très positifs

[Si 1, 2, 3 ou 4]:

Quel(s) problème(s)? (*) 1 --> 9 _____ Consultes-tu quelqu'un pour t'aider?

(Si Oui:) Qui? Personne(s) consultée(s) et Aide(s) reçue(s): [Voir 8.1]

8.3 Dans le passé, as-tu déjà consulté quelqu'un pour t'aider à résoudre des problèmes personnels?

1 = OUI: Pour quels probl. (secteurs de ta vie)? 1 9 _____ Parlé à qui?

2 = NON: A qui parles-tu quand tu as des problèmes? (LE CODER AUSSI)

(C6) Personne(s) consultée(s) et Aide(s) reçue(s): [Voir 8.1]

(Si le S a parlé à quelqu'un autre qu'un ami ou parenté:
Combien de fois _____

8.4 As-tu déjà été hospitalisé pour des problèmes émotionnels, dans toute ta vie?

A) 2=NON 1=OUI:--> A quel âge? _____ ans Durée de l'hospitalisation:
_____ mois

Nom de l'hôpital:

_____ Raison de l'admission:

B) Deuxième fois? --> Mêmes questions !

8.5 L'ALCOOL maintenant:

A quel âge as-tu pris ton premier verre? _____ ans
Quoi? _____

Combien de verres /sem. ou /mois buvais-tu ds l'année qui a suivi ton 1^{er} verre?

_____ verres par () SEM /() MOIS ou autre: _____

6 derniers mois: _____ verres par () SEM /() MOIS ou autre: _____

Si S ne boit pas beaucoup: Entre les 2 périodes, as-tu bu plus?

1 = OUI 2 = NON

Si OUI: _____ verres par semaine A quel(s) âge(s)? _____

8.6 [Si le S boit ou a déjà bu "beaucoup"]: 1 = OUI 2 = NON:

Ca t'es-tu déjà arrivé de prendre un verre le matin en te levant? _____

As-tu déjà penser qu'il faudrait que tu diminues de boire? _____

As-tu déjà été dérangé par des commentaires parce que tu bois? _____

T'es-tu déjà senti coupable (pas content de toi) parce que tu buvais? _____

8.7 Prends-tu de la DROGUE? 2 = NON 1 = OUI

Quoi: _____

Si oui: Fréquence actuelle: _____ fois/mois

Fréq. passée: _____ fois/mois

Si NON: En as-tu déjà pris? 2 1 Quoi: _____

8.8 [Si le S prend ou a déjà pris de la drogue]: 1 = OUI 2 = NON:

Ca t'es-tu déjà arrivé d'en prendre le matin en te levant? _____

As-tu déjà penser qu'il faudrait que tu diminues d'en prendre? _____

As-tu déjà été dérangé par des commentaires parce que t'en prenais? _____

T'es-tu déjà senti coupable (pas content de toi) p. q. tu prenais de la drogue? _____

9. VIE SOCIALE:

9.1 Est-ce que tu pratiques des sports de temps à autre?

{C7} Type: _____ Fréq. : _____

Fréquence: 0 = aucun sport 1 = 1 fois/mois 2 = 2 fois/mois
3 = 1 fois/semaine 4 = 2 fois/semaine 5 = plus de 2x/sem.

1: Quel autre genre de loisirs as-tu dans tes temps libres?

2: Et avec tes amis?

{AB1} 1: _____

{C6-7-8} 2: _____

Cotes (loisirs):

01 = Ecouter musique/T.V.	02 = Marcher	17 = Jeux de société
03 = Lecture	04 = Cinéma	18 = Restaurants
05 = Musicien	06 = Voir des amis	19 = Mécanique
07 = Entretien maison	08 = Magasiner	20 = Bénévolat
09 = Ordinateur + jeux	10 = Camper, chalet	21 = Promenade d'auto
11 = Danser	12 = Clubs, bars	22 = Voyages
13 = Autres arts	14 = Artisanats	
15 = Autres	16 = Arcades	

9.3A) Fais-tu partie d'un groupe ou d'un club social? 2 = NON

1 = OUI

{AB1}

{C7-8} Nom, type d'activités, rôle du S: _____

Fais-tu partie d'un mouvement spirituel ou d'un groupe religieux?

2 = Non 1 = Oui

Nom, rôle (titre) et participation du S: _____

9.4 **AMITIÉS:** (Note: Mettre un crochet au-dessus de "bons" si S. en parle à la 1^{re} quest.):

A) Combien d'amis as-tu? _____ Combien de bons amis as-tu? _____

{AB1-2} Combien parmi eux font partie de ta parenté? _____

Lien _____

{C7}

B) As-tu une gang d'amis que tu rencontres régulièrement? 1=Oui
2=Parfois 3=Non

C) [Note: Pour les 2 prochaines questions, utilisez les codes suivants]:

(0 = jamais 1 = rarement 2 = 50-50 3 = souvent 4 = toujours)

La plupart du temps, préfères-tu être seul (0 --> 4) _____

Est-ce toi qui fait les 1^{ers} pas, le plus souvent? (0 --> 4) _____

9.5 Combien de fois/semaine ou /mois rencontres-tu ou contactes-tu des amis en dehors de l'école, du travail? (Compter les téléphones aussi)

{AB1} TOTAL: _____ fois par () semaine ou () mois

9.6 Maintenant, j'aimerais savoir qu'est-ce que tu comptes faire dans l'année qui vient? (Écrire les réponses sur les lignes ci-dessous & encercler 1->3)

- 1) Plans définis, organisés
- 2) Plans moins définis, essai de différentes possibilités
- 3) Aucun plan d'arrêté

(Si 3: Dans 1 an d'ici, en _____ 19 _____, y a-t-il des choses qui auront changées dans ta vie?)

9.7 Nommes-moi des choses que tu adores faire?

{CB-9} _____ TOTAL: _____

10. CALL BACK INFORMATION:

Bon, maintenant, c'est à ton tour: As-tu des questions à me poser sur la recherche?

[Écrire les questions et commentaires du S]

10.1 C'est POSS'BLE que l'on te demande de venir à l'Université pour une rencontre, tu serais dédommagé de 50\$ pour le temps que tu nous offres. Penses-tu que ça t'intéresserait?

1=Oui 3=Non Raison: _____

Si 1 ou 2: Jour _____ Soir _____ ? _____ 2 = Peut-être (rappeler)

(Si 1,2): On ne sait pas encore SI tu vas être appelée ou quand tu viendrais. C'est l'ordinateur qui choisit les noms. C'est comme une loterie. Ça peut être dans un mois, comme dans un an. On t'appellera pour fixer un rendez-vous.

10.2 Et puis, est-ce que tu permets qu'on te rappelle dans les prochains 6 à 12 mois pour avoir d'autres nouvelles?

1 = Oui 2 = Non Raison: _____

10.3 Prévois-tu demeurer à la même adresse pour au moins un an?

1=Oui 2=Non Nouvelle adresse: _____

Tél.: _____ Date du déménagement: _____

10.4 Pour les femmes avec des enfants seulement: Est-ce que tu permettrais qu'on fasse une visite chez toi pour parler de ton (tes) enfant(s)?

1 = Oui 2 = Non Raison: _____

3 = Peut-être (rappeler) Quand: _____

11. HELP OFFERED:

Tu nous as donné pas mal d'informations personnelles à propos de la façon dont tu t'adaptes. Tu peux être certain(e) que ça nous aide beaucoup à savoir comment vivent les jeunes adultes. De notre côté, on t'invite à nous appeler si tu vis un problème d'adaptation quelconque. On peut agir comme référence dans ces cas-là.

(Give name and phone number): [Linda ou Claude --> 848-2253]

Aussi, si tu changes d'adresse au cours des prochains mois, j'aimerais que tu nous appelles pour nous le laisser savoir.

12. INTERVIEWEUR: Vos impressions de l'adaptation du S et de l'entrevue:

Code both Zigler - Phillips & PAS for the last 6 months only:

CODES DE RÉFÉRENCE DU BTI - II

6. VIE AMOUREUSE:

(* Raisons: 1=Argent 2=Goûts différents 3=Caractères différent
4=Problèmes familiaux 5=Fidélité 6=Côté sexuel
7=Violence 8=Éducation de l'enfant 9=Autres (quoi?)

7. SANTÉ

*Cote (de sévérité du probl.): 0 = Aucune maladie, aucun problème
1 = Maladie "moins" grave
2 = Maladie très grave, danger pr la vie
3 = Accident, blessure...
4 = Autre: difformités, etc.
5 = Obstétrique, gynécologie, MTS
6 = Maladie "mentale"
7 = Probl. relié à la drogue &/ou à l'alcool

8.1 MOMENTS DIFF.: Secteurs problèmes:

1 = Famille 2 = Amitié 3 = Conjoint (e)
4 = Argent 5 = École 6 = Travail
7 = Mental 8 = Santé 9 = Autre _____

Personne consultée: 1=médecin 2=ami
3=psychologue 4=trav. social,éducateur spéc
5=prêtre 6=parenté
7=conseiller 8=psychiatre
9=autre (spécifier:) [Inclure chum/conjoint]

Aide reçue: 1 = thérapie 2 = hospitalisation
3 = évaluation 4 = médicaments
5 = soutien, support moral
6 = démarches légales ou autres
7 = autre (spécifier:) _____

8.2 ÉMOTIONS MAINTENANT:

1 :très négatifs 2 :moyennement négatifs 3:légèrement négatifs
4 :neutres
5 :légèrement positifs 6 :moyennement positifs 7 :très positifs

9.2 LOISIRS:

01 = Ecouter musique/T.V. 02 = Marcher 17 = Jeux de société
03 = Lecture 04 = Cinéma 18 = Restaurants
05 = Musicien 06 = Voir des amis 19 = Mécanique
07 = Entretien maison 08 = Magasiner 20 = Bénévolat
09 = Ordinateur + jeux 10 = Camper, chalet 21 = Promenade d'auto
11 = Danser 12 = Clubs, bars 22 = Voyages
13 = Autres arts 14 = Artisanats
15 = Autres 16 = Arcades

Appendix C and C1

French Version of the Life Experience Survey

and

English Version of the Life Experience Survey

LIFE EXPERIENCE SURVEY

Voici une list d'événements qui apportent quelquefois des changements dans la vie de ceux qui en font l'expérience, et qui demandent une réadaptation sociale. Faites un crochet vis-à-vis les événements que vous avez vécu les 12 derniers mois dans l'espace réservé indiqué "C'est arrivé _____."

Veillez nous indiquer, pour chacun des items que vous avez cochés, le degré d'impact, positif (plaisant) ou négatif (déplaisant), qu'il a eu sur votre vie, au moment où l'événement s'est produit. En d'autres termes, indiquez le type d'impact et son degré. Une évaluation de 7 indique un impact extrêmement négatif. Une évaluation de 4 suggère que l'événement avait un impact à la fois positif et négatif. Une évaluation de 1 indique un impact extrêmement positif.

Encerclez le chiffre qui correspond à votre choix.

- 7 Extrêmement négatif
- 6 Modérément négatif
- 5 Quelque peu négatif
- 4 A la fois positif et négatif
- 3 Quelque peu positif
- 2 Modérément positif
- 1 Extrêmement positif

1. Mariage	7	6	5	4	3	2	1
	C'est arrivé _____						
2. Détention en prison ou autre institution comparable	7	6	5	4	3	2	1
	C'est arrivé _____						
3. Décès du conjoint	7	6	5	4	3	2	1
	C'est arrivé _____						
4. Changement important dans les habitudes de sommeil (beaucoup plus ou beau- coup moins que d'habitude)	7	6	5	4	3	2	1
	C'est arrivé _____						
5. Décès d'un membre de la famille	7	6	5	4	3	2	1
	C'est arrivé _____						
6. Changement important dans les habitudes alimentaires (manger beaucoup plus ou beaucoup moins)	7	6	5	4	3	2	1
	C'est arrivé _____						
7. Saisie d'une hypothèque ou d'un prêt	7	6	5	4	3	2	1
	C'est arrivé _____						
8. Décès d'un ami intime	7	6	5	4	3	2	1
	C'est arrivé _____						
9. Réalisation personnelle remarquable	7	6	5	4	3	2	1
	C'est arrivé _____						

10.	Infraction mineure (billet de vitesse, trouble à l'ordre public)	7	6	5	4	3	2	1
		C'est arrivé _____						
11.	Changements dans la situation au travail (responsabilités différentes, changement important dans les conditions ou les heures de travail, etc.)	7	6	5	4	3	2	1
		C'est arrivé _____						
12.	Nouvel emploi	7	6	5	4	3	2	1
		C'est arrivé _____						
13.	Maladie grave d'un membre de la famille	7	6	5	4	3	2	1
		C'est arrivé _____						
14.	Problèmes de nature sexuelle	7	6	5	4	3	2	1
		C'est arrivé _____						
15.	Problèmes avec l'employeur (danger de perdre son emploi, d'être suspendu, d'avoir une démotion, etc.)	7	6	5	4	3	2	1
		C'est arrivé _____						
16.	Changement important dans la condition financière (bien meilleure ou bien pire)	7	6	5	4	3	2	1
		C'est arrivé _____						
17.	Changement important dans la relation avec les membres de la famille (rapprochement accru ou diminué)	7	6	5	4	3	2	1
		C'est arrivé _____						
18.	Ajout d'un membre à la famille (naissance, adoption, membre de la famille qui emménage)	7	6	5	4	3	2	1
		C'est arrivé _____						
19.	Problèmes à s'occuper de parents ou de beaux-parents	7	6	5	4	3	2	1
		C'est arrivé _____						
20.	Changement de résidence	7	6	5	4	3	2	1
		C'est arrivé _____						
21.	Séparation d'avec le conjoint (à cause de conflits)	7	6	5	4	3	2	1
		C'est arrivé _____						
22.	Changement important dans les activités religieuses (fréquentation accrue ou diminuée)	7	6	5	4	3	2	1
		C'est arrivé _____						
23.	Réconciliation avec le conjoint	7	6	5	4	3	2	1
		C'est arrivé _____						
24.	Changement important dans le nombre de conflits avec le conjoint (beaucoup plus ou beaucoup moins)	7	6	5	4	3	2	1
		C'est arrivé _____						

- | | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---|---|---|---|---|---|
| 25. Homme marié: Changement dans la situation d'emploi de la femme (commence à travailler, cesse, occupe un nouvel emploi, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 26. Femme mariée: changement dans la situation d'emploi ou mari (commence à travailler, cesse, occupe un nouvel emploi, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 27. Changement important dans le genre habituel ou le nombre d'activités récréatives | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 28. Emprunt de plus de \$10,000 (achat d'une maison, d'un commerce, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 29. Emprunt de moins de \$10,000 (achat d'une automobile, téléviseur, prêt étudiant, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 30. Congédié de son emploi | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 31. Maladie ou accident grave | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 32. Changement important dans les activités sociales e.g., parties cinéma, visites (participation accrue ou diminuée) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 33. Changement dans les conditions de vie familiale (construction d'une nouvelle maison, redécoration, détérioration de la maison, du voisinage, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 34. Divorce | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 35. Accident ou maladie grave d'un ami intime | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 36. Prise de la retraite | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 37. Fils ou fille qui quitte le foyer (mariage, études, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |
| 38. Séparation d'avec le conjoint (à cause de l'emploi, voyage, etc.) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | C'est arrivé _____ | | | | | | |

Autre expériences récentes qui ont eu un impact sur votre vie.
Ecrivez et évaluez.

- 39. _____
- 40. _____
- 41. _____

The Life Experiences Survey

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social readjustment. Please check those events which you have experienced in the recent past and indicate the time period during which you have experienced each event. Be sure that all check marks are directly across from the items they correspond to.

Also, for each item checked below, please indicate the extent to which you viewed the event as having either a positive or negative impact on your life at the time the event occurred. That is, indicate the type and extent of impact that the event had. A rating of -3 would indicate an extremely negative impact. A rating of 0 suggests no impact either positive or negative. A rating of +3 would indicate an extremely positive impact.

	extrem neg.	moder neg.	some neg	no impact	slight pos.	moder pos.	extrem pos
1. Marriage	-3	-2	-1	0	+1	+2	+3
2. Detention in jail or comparable institution	-3	-2	-1	0	+1	+2	+3
3. Death of spouse	-3	-2	-1	0	+1	+2	+3
4. Major change in sleeping habits.	-3	-2	-1	0	+1	+2	+3
5. Death of close family member.	-3	-2	-1	0	+1	+2	+3
6. Major change in eating habits (much more or much less food intake).	-3	-2	-1	0	+1	+2	+3
7. Foreclosure on mortgage or loan.	-3	-2	-1	0	+1	+2	+3
8. Death of close friend.	-3	-2	-1	0	+1	+2	+3
9. Outstanding personal achievement.	-3	-2	-1	0	+1	+2	+3
10. Minor law violations (traffic tickets, disturbing the peace, etc.).	-3	-2	-1	0	+1	+2	+3
11. Changed work situation (different work responsibility, major change in working conditions, working hours, etc.).	-3	-2	-1	0	+1	+2	+3

12.	New job.	-3	-2	-1	0	+1	+2	+3
13.	Serious illness or injury of close family member.	-3	-2	-1	0	+1	+2	+3
14.	Sexual difficulties.	-3	-2	-1	0	+1	+2	+3
15.	Trouble with employer (in danger of losing job, being suspended, demoted, etc.).	-3	-2	-1	0	+1	+2	+3
16.	Trouble with in-laws.	-3	-2	-1	0	+1	+2	+3
17.	Major change in financial status (a lot better off or a lot worse off).	-3	-2	-1	0	+1	+2	+3
18.	Major change in closeness of family members (increased or decreased closeness).	-3	-2	-1	0	+1	+2	+3
19.	Gaining a new family member (through birth, adoption, family member moving in, etc.).	-3	-2	-1	0	+1	+2	+3
20.	Change of residence.	-3	-2	-1	0	+1	+2	+3
21.	Marital separation from mate (due to conflict).	-3	-2	-1	0	+1	+2	+3
22.	Major change in church activities (increased or decreased attendance).	-3	-2	-1	0	+1	+2	+3
23.	Marital reconciliation with mate.	-3	-2	-1	0	+1	+2	+3
24.	Major change in number of arguments with spouse (a lot more or a lot less).	-3	-2	-1	0	+1	+2	+3
25.	<u>Married male</u> : Change in wife's work outside the home (beginning work, ceasing work, changing to a new job, etc.).	-3	-2	-1	0	+1	+2	+3

26.	<u>Married female:</u> Change in husband's work (loss of job, beginning new job, retirement, etc.).	-3	-2	-1	0	+1	+2	+3
27.	Major change in usual type and/or amount of recreation.	-3	-2	-1	0	+1	+2	+3
28.	Borrowing more than \$10,000 (buying home, business, etc.).	-3	-2	-1	0	+1	+2	+3
29.	Borrowing less than \$10,000 (buying car, TV, getting school loan, etc.).	-3	-2	-1	0	+1	+2	+3
30.	Being fired from job.	-3	-2	-1	0	+1	+2	+3
31.	Major personal illness or injury.	-3	-2	-1	0	+1	+2	+3
32.	Major change in social activities, e.g., parties, movies, visiting (increased or decreased participation).	-3	-2	-1	0	+1	+2	+3
33.	Major change in living conditions of family (building new home, remodelling, deterioration of home, neighbourhood, etc.).	-3	-2	-1	0	+1	+2	+3
34.	Divorce.	-3	-2	-1	0	+1	+2	+3
35.	Serious injury or illness of close friend.	-3	-2	-1	0	+1	+2	+3
36.	Retirement from work.	-3	-2	-1	0	+1	+2	+3
37.	Son or daughter leaving home (due to marriage, college, etc.).	-3	-2	-1	0	+1	+2	+3
38.	Separation from spouse (due to work, travel, etc.).	-3	-2	-1	0	+1	+2	+3

Other recent experiences
which have had an impact on
your life. List and rate.

39.	_____	-3	-2	-1	0	+1	+2	+3
40.	_____	-3	-2	-1	0	+1	+2	+3
41.	_____	-3	-2	-1	0	+1	+2	+3

Appendix D and D1
French Version of the Hassles Scale
and
English Version of the Hassles Scale

ÉCHELLE D'IRRITANTS

Directives: On appelle irritants, diverses tracasseries allant d'ennuis mineurs à des pressions, problèmes ou difficultés graves qui peuvent se produire plus ou moins souvent.

La list qui suit énumère une série de situations susceptibles de tracasser une personne. Encerclez d'abord les tracas que vous avez eus au cours du dernier mois. Indiquez ensuite LA GRAVITE de ces tracas en encerclant les chiffres 1, 2, ou 3 à droit. Si des préoccupations ne vous ont pas causé de dérangement, NE LES ENCERCLEZ PAS.

	IRRITANTS	GRAVITE		
		1.	2.	3.
		Un peu grave	Modérément grave	Extrêmement grave
(1)	Objets égarés ou perdus	1	2	3
(2)	Voisins agaçants	1	2	3
(3)	Obligations sociales	1	2	3
(4)	Fumeurs manquant d'égards	1	2	3
(5)	Pensées troublantes au sujet de l'avenir	1	2	3
(6)	Pensées en rapport avec la mort	1	2	3
(7)	Santé d'un membre de la famille	1	2	3
(8)	Manque d'argent pour les vêtements	1	2	3
(9)	Manque d'argent pour le logement	1	2	3
(10)	Soucis d'argent	1	2	3
(11)	Soucis liés à l'obtention de crédit	1	2	3
(12)	Soucis d'argent pour des situations urgentes	1	2	3
(13)	Quelqu'un vous doit de l'argent	1	2	3
(14)	Responsabilité financière pour quelqu'un qui n'habite pas avec vous	1	2	3
(15)	Ménager l'eau, l'électricité, etc.	1	2	3
(16)	Trop fumer	1	2	3
(17)	Consommation d'alcool	1	2	3
(18)	Consommation personnelle de drogues	1	2	3
(19)	Trop de responsabilités	1	2	3
(20)	Décisions d'avoir des enfants	1	2	3
(21)	Colocataires qui ne sont pas de votre famille	1	2	3
(22)	Soins à prodiguer aux animaux familiers	1	2	3
(23)	Planification des repas	1	2	3
(24)	Souci au sujet du sens de la vie	1	2	3
(25)	Difficulté à vous détendre	1	2	3
(26)	Difficulté à prendre des décisions	1	2	3
(27)	Problèmes à vous entendre avec vos camarades de travail	1	2	3
(28)	Clients qui vous donnent du fil à retordre	1	2	3
(29)	Entretien ménager	1	2	3
(30)	Soucis au sujet de la sécurité d'emploi	1	2	3
(31)	Soucis au sujet de la retraite	1	2	3
(32)	Licenciement ou chômage	1	2	3
(33)	Désenchantement face à vos fonctions professionnelles actuelles	1	2	3
(34)	Relations difficiles avec vos camarages de travail	1	2	3

(35)	Manque d'argent pour vos besoins élémentaires	1	2	3
(36)	Manque d'argent pour la nourriture	1	2	3
(37)	Trop d'interruptions	1	2	3
(38)	Compagnie inattendue	1	2	3
(39)	Trop de temps passé à discuter	1	2	3
(40)	Obligation d'attendre	1	2	3
(41)	Soucis au sujet d'accidents	1	2	3
(42)	Sentiment de solitude	1	2	3
(43)	Manque d'argent pour vous soigner	1	2	3
(44)	Peur de la confrontation	1	2	3
(45)	Sécurité financière	1	2	3
(46)	Erreurs pratiques bêtes	1	2	3
(47)	Difficulté à vous exprimer	1	2	3
(48)	Maladie physique	1	2	3
(49)	Effets secondaires des médicaments	1	2	3
(50)	Soucis au sujet d'un traitement médical	1	2	3
(51)	Apparence physique	1	2	3
(52)	Peur du rejet	1	2	3
(53)	Difficultés à tomber enceinte	1	2	3
(54)	Problèmes sexuels découlant de problèmes physiques.	1	2	3
(55)	Problèmes sexuels autres que ceux découlant de problèmes physiques	1	2	3
(56)	Soucis au sujet de votre santé en général	1	2	3
(57)	Manque de relations sociales	1	2	3
(58)	Amis ou parents trop éloignés	1	2	3
(59)	Préparation des repas	1	2	3
(60)	Pertes de temps	1	2	3
(61)	Entretien automobile	1	2	3
(62)	Remplir des formulaires	1	2	3
(63)	Détérioration du voisinage	1	2	3
(64)	Financement des études des enfants	1	2	3
(65)	Problèmes avec des employés	1	2	3
(66)	Problèmes au travail en rapport avec le fait d'être une femme ou un homme.	1	2	3
(67)	Diminution des habiletés physiques	1	2	3
(68)	Sentiment d'être exploité(e)	1	2	3
(69)	Souci au sujet de fonctions corporelles	1	2	3
(70)	Prix à la hausse des biens courants	1	2	3
(71)	Manque de repos	1	2	3
(72)	Manque de sommeil	1	2	3
(73)	Vieillesse des parents	1	2	3
(74)	Problèmes avec les enfants	1	2	3
(75)	Problèmes avec des personnes plus jeunes que vous	1	2	3
(76)	Problèmes avec votre amant(e)	1	2	3
(77)	Difficultés à voir ou à entendre	1	2	3
(78)	Surchargé(e) en raison des responsabilités familiales	1	2	3
(79)	Trop de choses à faire	1	2	3
(80)	Travail sans intérêt	1	2	3
(81)	Soucis en rapport avec la satisfaction de normes élevées.	1	2	3
(82)	Manquer d'argent et d'amitiés ou connaissances	1	2	3
(83)	Insatisfactions au travail	1	2	3

(84)	Inquiétudes au sujet de décisions relatives au changement d'emploi	1	2	3
(85)	Difficulté à lire, à écrire ou à épeler	1	2	3
(86)	Trop de réunions	1	2	3
(87)	Problèmes reliés au divorce ou à la séparation	1	2	3
(88)	Difficulté d'apprentissage des mathématiques	1	2	3
(89)	Comméragé	1	2	3
(90)	Problèmes juridiques	1	2	3
(91)	Souci du poids	1	2	3
(92)	Manque de temps pour faire des choses nécessaires	1	2	3
(93)	Télévision	1	2	3
(94)	Manque d'énergie personnelle	1	2	3
(95)	Souci au sujet des conflits intérieurs	1	2	3
(96)	En conflit avec les choses à faire	1	2	3
(97)	Regrets des décisions passées	1	2	3
(98)	Problèmes menstruels (périodiques)	1	2	3
(99)	Le temps qu'il fait	1	2	3
(100)	Cauchemards	1	2	3
(101)	Difficultés à forcer	1	2	3
(102)	Tracasseries de la part du patron ou du superviseur	1	2	3
(103)	Difficultés avec les amis	1	2	3
(104)	Manque de temps pour s'occuper de la famille	1	2	3
(105)	Problèmes de transport	1	2	3
(106)	Manque d'argent pour le transport	1	2	3
(107)	Manque d'argent pour les loisirs et les divertissements	1	2	3
(108)	Courses à faire	1	2	3
(109)	Préjugés ou discrimination de la part des autres	1	2	3
(110)	Propriété, placements ou impôts	1	2	3
(111)	Manque de temps pour les loisirs et les divertissements	1	2	3
(112)	Entretien extérieur de la maison ou de terrain	1	2	3
(113)	Préoccupations au sujet de l'actualité	1	2	3
(114)	Bruit	1	2	3
(115)	Crime	1	2	3
(116)	Trafic	1	2	3
(117)	Pollution	1	2	3

(118) AVONS-NOUS OMIS CERTAINS DE VOS IRRITANT? DANS L'AFFIRMATIVE, VEUILLEZ LES ECRIRE CE-DESSOUS.

1 2 3

UNE DERNIERE QUESTION: UN CHANGEMENT DANS VOTRE VIE A-T-IL INFLUENCE VOS REPONSES? SI OUI, QUEL EST-IL?

THE HASSLES SCALE

Directions: Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.

Listed in the centre of the following pages are a number of ways in which a person can feel hassled. First, circle the hassles that have happened to you in the past month. Then look at the numbers on the right of the items you circled. Indicate by circling a 1, 2, or 3 how SEVERE each of the circled hassles has been for you in the past month. If a hassle did not occur in the last month do NOT circle it.

		SEVERITY		
		1.	2.	3.
		Somewhat severe	Moderately severe	Extremely severe
1.	Misplacing or losing things	1	2	3
2.	Troublesome neighbours	1	2	3
3.	Social obligations	1	2	3
4.	Inconsiderate smokers	1	2	3
5.	Troubling thoughts about your future	1	2	3
6.	Thoughts about death	1	2	3
7.	Health of a family member	1	2	3
8.	Not enough money for clothing	1	2	3
9.	Not enough money for housing	1	2	3
10.	Concerns about owing money	1	2	3
11.	Concerns about getting credit	1	2	3
12.	Concerns about money for emergencies	1	2	3
13.	Someone owes you money	1	2	3
14.	Financial responsibility for someone who doesn't live with you	1	2	3
15.	Cutting down on electricity, water, etc.	1	2	3
16.	Smoking too much	1	2	3
17.	Use of alcohol	1	2	3
18.	Personal use of drugs	1	2	3
19.	Too many responsibilities	1	2	3
20.	Decisions about having children	1	2	3
21.	Non-family members living in your house	1	2	3
22.	Care for pet	1	2	3
23.	Planning meals	1	2	3
24.	Concerned about the meaning of life	1	2	3
25.	Trouble relaxing	1	2	3
26.	Trouble making decisions	1	2	3
27.	Problems getting along with fellow workers ..	1	2	3
28.	Customers or clients give you a hard time ...	1	2	3
29.	Home maintenance (inside)	1	2	3
30.	Concerns about job security	1	2	3
31.	Concerns about retirement	1	2	3
32.	Laid-off or out of work	1	2	3
33.	Don't like current work duties	1	2	3
34.	Don't like fellow workers	1	2	3
35.	Not enough money for basic necessities	1	2	3
36.	Not enough money for food	1	2	3
37.	Too many interruptions	1	2	3
38.	Unexpected company	1	2	3
39.	Too much time on hands	1	2	3

40.	Having to wait	1	2	3
41.	Concerns about accidents	1	2	3
42.	Being lonely	1	2	3
43.	Not enough money for health care	1	2	3
44.	Fear of confrontation	1	2	3
45.	Financial security	1	2	3
46.	Silly practical mistakes	1	2	3
47.	Inability to express yourself	1	2	3
48.	Physical illness	1	2	3
49.	Side effects of medication	1	2	3
50.	Concerns about medical treatment	1	2	3
51.	Physical appearance	1	2	3
52.	Fear of rejection	1	2	3
53.	Difficulties with getting pregnant	1	2	3
54.	Sexual problems that result from physical problems	1	2	3
55.	Sexual problems other than those resulting from physical problems	1	2	3
56.	Concerns about health in general	1	2	3
57.	Not seeing enough people	1	2	3
58.	Friends or relatives too far away	1	2	3
59.	Preparing meals	1	2	3
60.	Wasting time	1	2	3
61.	Auto maintenance	1	2	3
62.	Filling out forms	1	2	3
63.	Neighborhood deterioration	1	2	3
64.	Financing children's education	1	2	3
65.	Problems with employees	1	2	3
66.	Problems on job due to being a woman or man .	1	2	3
67.	Declining physical abilities	1	2	3
68.	Being exploited	1	2	3
69.	Concerns about bodily functions	1	2	3
70.	Rising prices of common goods	1	2	3
71.	Not getting enough rest	1	2	3
72.	Not getting enough sleep	1	2	3
73.	Problems with aging parents	1	2	3
74.	Problems with your children	1	2	3
75.	Problems with persons younger than yourself .	1	2	3
76.	Problems with your lover	1	2	3
77.	Difficulties seeing or hearing	1	2	3
78.	Overloaded with family responsibility	1	2	3
79.	Too many things to do	1	2	3
80.	Unchallenging work	1	2	3
81.	Concerns about meeting high standards	1	2	3
82.	Financial dealings with friends or acquaintances	1	2	3
83.	Job dissatisfaction	1	2	3
84.	Worries about decisions to change jobs	1	2	3
85.	Trouble with reading, writing, or spelling abilities	1	2	3
86.	Too many meetings	1	2	3
87.	Problems with divorce or separation	1	2	3
88.	Trouble with arithmetic skills	1	2	3
89.	Gossip	1	2	3
90.	Legal problems	1	2	3
91.	Concerns about weight	1	2	3

92.	Not enough time to do the things you need to do	1	2	3
93.	Television	1	2	3
94.	Not enough personal energy	1	2	3
95.	Concerns about inner conflicts	1	2	3
96.	Feel conflicted over what to do	1	2	3
97.	Regrets over past decisions	1	2	3
98.	Menstrual (period) problems	1	2	3
99.	The weather	1	2	3
100.	Nightmares	1	2	3
101.	Concerns about getting ahead	1	2	3
102.	Hassles from boss or supervisor	1	2	3
103.	Difficulties with friends	1	2	3
104.	Not enough time for family	1	2	3
105.	Transportation problems	1	2	3
106.	Not enough money for transportation	1	2	3
107.	Not enough money for entertainment and recreation	1	2	3
108.	Shopping	1	2	3
109.	Prejudice and discrimination from others	1	2	3
110.	Property, investments or taxes	1	2	3
111.	Not enough time for entertainment and recreation	1	2	3
112.	Yardwork or outside home maintenance	1	2	3
113.	Concerns about news events	1	2	3
114.	Noise	1	2	3
115.	Crime	1	2	3
116.	Traffic	1	2	3
117.	Pollution	1	2	3

HAVE WE MISSED ANY OF YOUR HASSLES? IF SO,
WRITE THEM IN BELOW:

118. _____ 1 2 3

ONE MORE THING: HAS THERE BEEN A CHANGE IN
YOUR LIFE THAT AFFECTED HOW YOU ANSWERED THIS
SCALE? IF SO, TELL US WHAT IT WAS:

Appendix E and E1
French Version of the Symptom Checklist 90-Revised
and
English Version of the Symptom Checklist 90-Revised

Ci-dessous, se trouve une liste de problèmes et de plaintes que les gens forment de temps à autres. Veuillez, S.V.P., lire chacune de ses plaintes attentivement. Dès que vous l'aurez fait, indiquez par le numéro approprié la réponse qui décrit le mieux COMMENT CE PROBLEME VOUS A DERANGÉ OU AFFLIGE DURANT LES SEPT (7) DERNIERS JOURS, AUJOURD'HUI INCLUS.

ÉCHELLE: 0 pas du tout
 1 un peu
 2 modérément
 3 passablement
 4 énormément

EXEMPLE: COMMENT AVEZ-VOUS ÉTÉ DÉRANGÉ PAR:
 _____ 1. Des maux de dos

COMMENT AVEZ-VOUS ÉTÉ DÉRANGÉ PAR:

- _____ 1. des maux de tête
- _____ 2. la nervosité ou tremblement intérieur
- _____ 3. des pensées désagréables répétées
qui ne vous lâchaient pas
- _____ 4. des évanouissements ou des étourdissements
- _____ 5. la perte de l'intérêt ou du plaisir sexuel
- _____ 6. le fait d'être porté à critiquer les autres
- _____ 7. l'idée que quelqu'un d'autre contrôle vos pensées
- _____ 8. le sentiment que les autres surtout sont à blâmer
pour vos problèmes
- _____ 9. le fait d'avoir de la difficulté à vous rappeler
quelque chose
- _____ 10. le fait d'être inquiet(e) à propos de la malpropreté
ou de la négligence
- _____ 11. être facilement ennuyé(e) ou irrité(e)
- _____ 12. des douleurs au coeur ou à la poitrine
- _____ 13. la peur des espaces ouverts ou d'être sur la rue
- _____ 14. le sentiment de manquer d'énergie ou d'être au
ralenti
- _____ 15. des pensées d'en terminer avec la vie

- _____ 16. le fait d'entendre des voix que les autres
n'entendent pas
- _____ 17. des tremblements
- _____ 18. le sentiment qu'on ne peut pas se fier à la plupart
des gens
- _____ 19. le peu d'appétit
- _____ 20. le fait de pleurer facilement
- _____ 21. le fait d'être gêné(e) ou mal à l'aise avec des
personnes du sexe opposée
- _____ 22. le sentiment d'être pris(e) au piège ou immobilisé(e)
- _____ 23. avoir soudainement pris peur sans raison
- _____ 24. des accès de colère que vous ne pouviez pas contrôler
- _____ 25. être effrayé(e) de sortir seul(e) de la maison
- _____ 26. vous blâmer vous-même pour des choses
- _____ 27. des douleurs dans le bas du dos
- _____ 28. le sentiment de ne plus avancer dans ce que vous
faites
- _____ 29. le sentiment d'être seul(e)
- _____ 30. le fait d'avoir le cafard
- _____ 31. le fait de vous inquiéter trop à propos de rien
- _____ 32. n'être pas intéressé(e) à rien
- _____ 33. vous être senti(e) craintif(ve)
- _____ 34. le fait que vos sentiments sont trop facilement
blessés
- _____ 35. les autres gens sont au courant de vos pensées
intimes
- _____ 36. le sentiment que les autres ne vous comprennent pas
ou sont antipathiques
- _____ 37. le sentiment que les gens ne sont pas amicaux ou ne
vous aiment pas
- _____ 38. d'avoir à faire les choses très lentement pour
s'assurer que tout est correct
- _____ 39. des palpitations ou des battements rapides du coeur

- _____ 40. des nausées ou l'estomac dérangé
- _____ 41. le fait de vous sentir inférieur(e) aux autres
- _____ 42. des muscles endoloris
- _____ 43. le sentiment que vous êtes surveillé(e) ou que les autres parlent de vous
- _____ 44. de la difficulté à vous endormir
- _____ 45. le fait d'avoir à vérifier et revérifier ce que vous faites
- _____ 46. de la difficulté à prendre des décisions
- _____ 47. la peur de voyager par autobus, métro ou train
- _____ 48. de la difficulté à reprendre votre haleine
- _____ 49. bouffées de froid ou de chaleur
- _____ 50. d'avoir à éviter certaines choses, endroits ou activités parce-que vous en avez peur
- _____ 51. le fait de vous sentir la tête vide
- _____ 52. des engourdissements ou des démangeaisons de différentes parties de votre corps
- _____ 53. des serrements de gorge
- _____ 54. un sentiment de désespoir face à l'avenir
- _____ 55. de la difficulté à vous concentrer
- _____ 56. le fait de vous sentir faible de certaines parties de votre corps
- _____ 57. de vous sentir tendu(e) ou à bout de nerfs
- _____ 58. des sentiments de lourdeur dans les bras ou les jambes
- _____ 60. de penser à la mort ou à mourir
- _____ 61. vous sentir mal à l'aise quand les gens vous regardent ou parlent de vous
- _____ 62. avoir des pensées qui ne sont pas les vôtres
- _____ 63. avoir envie de battre, blesser ou faire mal à quelqu'un
- _____ 64. vous réveiller aux petites heures du matin
- _____ 65. avoir à répéter les mêmes gestes comme toucher, compter, laver

- _____ 66. passer des nuits blanches ou avoir le sommeil troublé
- _____ 67. avoir des envies de briser ou de casser des choses
- _____ 68. croire ou avoir l'idée que personne ne veut partager
- _____ 69. vous sentir très intimidé(e) par les autres
- _____ 70. vous sentir mal à l'aise parmi les foules comme au cinéma ou dans les grands magasins
- _____ 71. le sentiment que tout est un effort
- _____ 72. des crises de frayeur ou de panique
- _____ 73. vous sentir mal à l'aise de manger ou de boire en public
- _____ 74. avoir souvent des disputes
- _____ 75. vous sentir nerveux(e) lorsque vous êtes seul(e)
- _____ 76. les autres ne vous donnent pas le crédit souhaité pour vos accomplissements
- _____ 77. le sentiment d'être seul(e) même lorsque vous êtes avec d'autres
- _____ 78. vous sentir si agité(e) que vous ne pouvez pas rester assis(e) tranquille
- _____ 79. sentiment d'être bon à rien
- _____ 80. le sentiment que quelque chose de mauvais va vous arriver
- _____ 81. le fait de crier et de lancer des objets
- _____ 82. avoir peur que vous allez vous évanouir en public
- _____ 83. le sentiment que les gens prendront avantage de vous si vous les laissez faire
- _____ 84. d'avoir des pensées à propos du sexe qui vous dérangent beaucoup
- _____ 85. l'idée que vous devriez être puni(e) pour vos péchés
- _____ 86. des pensées et des impressions de nature effrayante
- _____ 87. l'idée que quelque chose de sérieux ne va pas avec votre corps
- _____ 88. ne jamais vous sentir proche d'une autre personne
- _____ 89. des sentiments de culpabilité
- _____ 90. l'idée que quelque chose ne va pas avec votre esprit

Symptom Checklist 90-Revised

Name: _____ Technician: _____ ID no. _____
 Location: _____ Visit No.: _____ Mode: S-R _____
 Age: _____ Sex: _____ Date: _____ Remarks: _____

INSTRUCTIONS

Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select one of the numbered descriptors that best describes HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST _____ INCLUDING TODAY. Place that number in the open block to the right of the problem. Do not skip any items, and print your number clearly. If you change your mind, erase your first number completely. Read the example below before beginning, and if you have any questions please ask the technician.

EXAMPLE

HOW MUCH WERE YOU DISTRESS BY:

Example: Body aches Answer Eg. 3

Descriptors

- 0 = Not at all
- 1 = A little bit
- 2 = Moderately
- 3 = Quite a bit
- 4 = Extremely

- 1. Headaches _____
- 2. Nervousness or shakiness inside _____
- 3. Repeated unpleasant thoughts that won't leave your mind . _____
- 4. Faintness or dizziness _____
- 5. Loss of sexual interest or pleasure _____
- 6. Feeling critical of others _____
- 7. The idea that someone else can control your thoughts _____
- 8. Feeling others are to blame for most of your troubles ... _____
- 9. Trouble remembering things _____
- 10. Worried about sloppiness or carelessness _____
- 11. Feeling easily annoyed or irritated _____
- 12. Pains in heart or chest _____
- 13. Feeling afraid in open spaces or in the streets _____
- 14. Feeling low in energy or slowed down _____

15. Thoughts of ending your life _____
16. Hearing voices that other people do not hear _____
17. Trembling _____
18. Feeling that most people can not be trusted _____
19. Poor appetite _____
20. Crying easily _____
21. Feeling shy or uneasy with the opposite sex _____
22. Feeling or being caught or trapped _____
23. Suddenly scared for no reason _____
24. Temper outbursts that you could not control _____
25. Feeling afraid to go out of your house alone _____
26. Blaming yourself for things _____
27. Pains in lower back _____
28. Feeling blocked in getting things done _____
29. Feeling lonely _____
30. Feeling blue _____
31. Worrying too much about things _____
32. Feeling no interest in things _____
33. Feeling fearful _____
34. Your feelings being easily hurt _____
35. Other people being aware of your private thoughts _____
36. Feeling others do not understand you or are
 unsympathetic _____
37. Feeling that people are unfriendly or dislike you _____
38. Having to do things very slowly to insure correctness ... _____
39. Heart pounding or racing _____
40. Nausea or upset stomach _____
41. Feeling inferior to others _____
42. Soreness of your muscles _____

43. Feeling that you are watched or talked about by others .. _____
44. Trouble falling asleep _____
45. Having to check and double check what you do _____
46. Difficulty making decisions _____
47. Feeling afraid to travel on buses, subways, or trains ... _____
48. Trouble getting your breath _____
49. Hot or cold spells _____
50. Having to avoid certain things places, or activities
because they frighten you _____
51. Your mind going blank _____
52. Numbness or tingling in parts of your body _____
53. A lump in your throat _____
54. Feeling hopeless about the future _____
55. Trouble concentrating _____
56. Feeling weak in parts of your body _____
57. Feeling tense or keyed up _____
58. Heavy feelings in your arms or legs _____
59. Thoughts of death or dying _____
60. Overeating _____
61. Feeling uneasy when people are watching or talking
about you _____
62. Having thoughts that are not your own _____
63. Having urges to beat, injure, or harm someone _____
64. Awakening in the early morning _____
65. Having to repeat the same actions such as touching,
counting, washing _____
66. Sleep that is restless or disturbed _____
67. Having urges to break or smash things _____
68. Having ideas or beliefs that others do not share _____
69. Feeling very self-conscious with others _____

70. Feeling uneasy in crowds, such as shopping or at a movie _____
71. Feeling everything is an effort _____
72. Spells of terror or panic _____
73. Feeling uncomfortable about eating or drinking in public _____
74. Getting into frequent arguments _____
75. Feeling nervous when you are left alone _____
76. Others not giving you proper credit for your achievements _____
77. Feeling lonely even when you are with people _____
78. Feeling so restless you couldn't sit still _____
79. Feelings of worthlessness _____
80. The feeling that something bad is going to happen to you _____
81. Shouting or throwing things _____
82. Feeling afraid you will faint in public _____
83. Feeling that people will take advantage of you if you let them _____
84. Having thoughts about sex that bother you a lot _____
85. The idea that you should be punished for your sins _____
86. Thoughts and images of a frightening nature _____
87. The idea that something serious is wrong with your body . _____
88. Never feeling close to other people _____
89. Feelings of guilt _____
90. The idea that something is wrong with your mind _____

Appendix F

The Premorbid Adjustment Scale

Premorbid Adjustment Scale

Childhood (up through age 11)

1. Sociability and withdrawal

- 0 Not withdrawn, actively and frequently seeks out social contacts
- 1
- 2 Mild withdrawal, enjoys socialization when involved, occasionally seeks opportunities to socialize
- 3
- 4 Moderately withdrawn, given to daydreaming and excessive fantasy, may passively allow self to be drawn into contact with others but does not seek it
- 5
- 6 Unrelated to others, withdrawn and isolated. Avoids contacts

2. Peer relationships

- 0 Many friends, close relationships with several
- 1
- 2 Close relationships with a few friends (one or two), casual friendships with others
- 3
- 4 Deviant friendship patterns: friendly with children younger or older only, or relatives only, or casual relationships only
- 5
- 6 Social isolate, no friends, not even superficial relationships

3. Scholastic performance

- 0 Excellent student
- 1
- 2 Good student
- 3
- 4 Fair student
- 5
- 6 Failing all classes

4. Adaptation to school

- 0 Good adaptation, enjoys school, no or rare discipline problems, has friends at school, likes most teachers
- 1
- 2 Fair adaptation, occasional discipline problem, not very interested in school, but no truancy, or rare. Has friends in school, but does not often take part in extracurricular activities
- 3
- 4 Poor adaptation, dislikes school, frequent truancy, frequent discipline problem
- 5
- 6 Refuses to have anything to do with school--delinquency or vandalism directed against school

Adolescence (Early, ages 12 - 15)

1. Sociability and withdrawal

- 0 Not withdrawn
- 1
- 2 Mild withdrawal, enjoys socialization when involved, occasionally seeks opportunities to socialize
- 3
- 4 Moderately withdrawn, given to daydreaming and excessive fantasy, may passively allow self to be drawn into contact with others, but does not seek it
- 5
- 6 Unrelated to others, withdrawn and isolated. Avoids contact.

2. Peer relationships

- 0 May friends, close relationships with several
- 1
- 2 Close relationships with a few friends (one or two), casual friendships with others
- 3
- 4 Deviant friendship patterns: friendly with children younger or older only, or relatives only, or casual relationships only
- 5
- 6 Social isolate, no friends, not even superficial relationships

3. Scholastic performance

- 0 Excellent student
- 1
- 2 Good student
- 3
- 4 Fair student
- 5
- 6 Failing all classes

4. Adaptation to school

- 0 Good adaptation, enjoys school, no or rare discipline problems, has friends at school, likes most teachers
- 1
- 2 Fair adaptation, occasional discipline problem, not very interested in school, but does not often take part in extracurricular activities
- 3
- 4 Poor adaptation, dislikes school, frequent truancy, frequent discipline problem
- 5
- 6 Refuses to have anything to do with school--delinquency or vandalism directed against school

5. Social-sexual aspects of life during early adolescence

- 0 Started dating, showed a "healthy interest" in the opposite sex, may have gone "steady," may include some sexual activity

- 1 Attachment and interest in others, may be same-sex attachments, may be a member of a group, interested in the opposite sex, although may not have close, emotional relationship with someone of the opposite sex, "crushes" and flirtations
- 2 Consistent deep interest in same-sex attachments with restricted or no interest in the opposite sex
- 3 Casual same-sex attachments, with inadequate attempts at relationships with the opposite sex. Casual contacts with both sexes
- 4 Casual contacts with the same sex, no interest in the opposite sex
- 5 A loner, no or rare contacts with either boys or girls
- 6 Antisocial, avoids and avoided by peers. (Differs from above in that an active avoidance of others rather than passive withdrawal is implied)

Adolescence (Late, ages 16 - 18)

1. Sociability and withdrawal

- 0 Not withdrawn
- 1
- 2 Mild withdrawal, enjoys socialization when involved, occasionally seeks opportunities to socialize
- 3
- 4 Moderately withdrawn, given to daydreaming and excessive fantasy, may passively allow self to be drawn into contact with others, but does not seek it
- 5
- 6 Unrelated to others, withdrawn and isolated. Avoids contact

2. Peer relationships

- 0 Many friends, close relationships with several
- 1
- 2 Close relationships with a few friends (one or two), casual friendships with others
- 3
- 4 Deviant friendship patterns: friendly with children younger or older only, or relatives only, or casual relationships only
- 5
- 6 Social isolate, no friends, not even superficial relationships

3. Scholastic performance

- 0 Excellent student
- 1
- 2 Good student
- 3
- 4 Fair student
- 5
- 6 Failing all classes

4. Adaptation to school

- 0 Good adaptation, enjoys school, no or rare discipline problems, has friends at school, likes most teachers
- 1

- 2 Fair adaptation, occasional discipline problem, not very interested in school, but no truancy, or rare. Has friends in school, but does not often take part in extracurricular activities
- 3
- 4 Poor adaptation, dislikes school, frequent truancy, frequent discipline problem
- 5
- 6 Refuses to have anything to do with school--delinquency or vandalism directed against school

5. Social aspects of sexual life during adolescence and immediately beyond

- 0 Always showed a "healthy interest" in the opposite sex, dating, has gone "steady," engaged in some sexual activity (not necessarily intercourse)
- 1 Dated regularly. Had only one friend of the opposite sex with whom the patient went "steady" for a long time. (Includes sexual aspects of a relationship, although not necessarily intercourse; implies a twosome, pairing off into couples, as distinguished from below)
- 2 Always mixed closely with boys and girls. (Involves membership in a crowd, interest in and attachment to others, no couples)
- 3 Consistent deep interest in same-sex attachments with restricted or no interest in the opposite sex
- 4 Casual same-sex attachments, with inadequate attempts at adjustment to going out with the opposite sex. Casual contacts with both sexes
- 5 Casual contacts with the same sex with lack of interest in opposite sex. Occasional contacts with the opposite sex
- 6 No desire to be with boys and girls, never went out with opposite sex

Adulthood (Age 19 and above)

1. Sociability and withdrawal

- 0 Not withdrawn, actively and frequently seeks out social contact
- 1
- 2 Mild withdrawal, enjoys socialization when involved, occasionally seeks opportunities to socialize
- 3
- 4 Moderately withdrawn, given to daydreaming and excessive fantasy, may passively allow self to be drawn into contact with others, but does not seek it
- 5
- 6 Unrelated to others, withdrawn and isolated. Avoids contact

2. Peer relationships

- 0 Many friends, close relationships with several
- 1
- 2 Close relationships with a few friends (one or two), casual friendships with others
- 3
- 4 Deviant friendship patterns: friendly with children younger or older only, or relatives only, or casual relationships only
- 5
- 6 Social isolate, no friends, not even superficial relationships

3. Aspects of adult social-sexual life

a. Married, presently or formerly

- 0 Married, only one marriage (or remarried as a result of death of spouse), living as a unit, adequate sexual relations
- 1 currently married with history of low sexual drive, periods of difficult sexual relations, or extramarital affair
- 1 Married, more than one time, currently remarried. Adequate sexual relations during at least one marriage
- 2 Married, or divorced and remarried, with chronically inadequate sex life
- 2 Married, and apparently permanently separated or divorced without remarriage, but maintained a home in one marriage for at least 3 years
- 3 Same as above, but: divorce occurred over 3 years ago, and, while married, maintained a home for less than 3 years

b. Never married, over 30:

- 2 Has been engaged one or more times or has had a long-term relationship (at least 2 years) involving heterosexual or homosexual relations, or apparent evidence of a love affair with one person, but unable to achieve a long-term commitment such as marriage
- 3 Long-term heterosexual or homosexual relationship lasting over 6 months but less than 2 years. (If stable, long-lasting homosexual relationship, over 2 years, score as "3.")
- 4 Brief, or short-term dating experiences (heterosexual or homosexual) with one or more partners, but no long-lasting sexual experience with a single partner
- 5 Sexual and/or social relationships rare or infrequent
- 6 Minimal sexual or social interest in either men or women, isolated

c. Never married, age 20 - 29

- 0 Has had at least one long-term love affair (minimum of 6 months) or engagement, even though religious or other prohibitions or inhibitions may have prevented actual sexual union. May have live together
- 1 Has dated actively, had several "boyfriends" or "girlfriends," some relationships have lasted a few months, but no long-term relationships. Relationships may have been "serious," but a long-term commitment such as marriage was not understood to be an eventuality
- 3 Brief, short-term dating experiences or "affairs" with one or more partners, but no long-lasting sexual experiences with a single partner
- 4 Casual sexual or social relationships with persons of either sex with no deep emotional bonds
- 5 Sexual and/or social relationships rare or infrequent
- 6 Minimal sexual or social interest in either men or women, isolated

General

1. Education

- 0 Completed college and/or graduate school, or professional school (Law for example)

- 1 Completed high school and some college or vocational training school or business school (such as secretarial or computer programming schools)
 - 2 Completed high school
 - 3
 - 4 Completed eighth grade
 - 5
 - 6 Did not get beyond fifth grade
2. During a period of 3 years up to 6 months before first hospitalization or onset of first episode, patient was employed for pay or functioning in school
- 0 All the time
 - 1
 - 2 Half the time
 - 3
 - 4 Briefly, about 25 percent of the time
 - 5
 - 6 Never
3. Within a period of a year up to 6 months before first hospitalization or first episode change in work or school performance occurred
- 0 Abruptly
 - 1
 - 2 Within 3 months
 - 3
 - 4 Within 6 months
 - 5
 - 6 Imperceptibly, difficult or not possible to determine onset of deterioration
4. During a period of 3 years up to 6 months before first hospitalization or first episode, frequency of job change, if working, or interruption of school attendance was
- 0 Same job held, or remained in school
 - 1
 - 2 Job change or school interruption occurred two to three times
 - 3
 - 4 Kept the same job more than 8 months but less than a year, or remained continuously in school for the same period
 - 5
 - 6 Less than 2 weeks at a job or in school
5. Establishment of independence
- 0 Successfully established residence away from family home, financially independent of parents
 - 2 Made unsuccessful attempts to establish independent residence, lives in parents' home, but pays parents room and board, otherwise financially independent
 - 4 Lives in parents' home, receiving an allowance from parents which patient budgets to pay for entertainment, clothes, etc.
 - 6 Made no attempt to leave home or be financially independent

6. Global assessment of highest level of functioning achieved in patient's life

- 0 Fully able to function successfully in and take pleasure from (1) school or job; (2) friends; (3) intimate sexual relationships; (4) church, hobbies, etc. Enjoys life and copes with it well
- 2 Able to function well in and enjoys some spheres of life, but has a definite lack of success in at least one area
- 4 Minimum success and pleasure in three areas of life
- 6 Unable to function in or enjoy any aspect of life.

7. Social-personal adjustment

- 0 A leader or officer in formally designated groups, clubs, organizations, or athletic teams in senior high school, vocational school, college, or young adulthood. Involved in intimate, close relationship with others
- 1 An active and interested participant, but did not play a leading role in groups of friends, clubs, organization, or athletic teams, but was involved in close relationships with others also
- 2 A nominal member, but had no involvement in or commitment to, groups of friends, clubs, organizations, etc. Had close relationships with a few friends
- 3 From adolescence through early adulthood had a few casual friends
- 4 From adolescence through early adulthood had no real friends, only superficial relationships
- 5 From adolescence through early adulthood (i.e., after childhood), quiet, seclusive, preferred to be by self, minimal efforts to maintain any contact at all with others
- 6 No desire to be with peers or others. Either asocial or antisocial

8. Degree of interest in life

- 0 Keen, ambitious interest in some of the following: home, family, friends, work, sports, art, pets, gardening, social activities, music, and drama
- 2 Moderate degree of interest in several activities including social gatherings, sports, music, and opposite sex
- 4 Mild interest in a few things such as job, family, quiet social gatherings. The interest is barely sustaining
- 6 Withdrawn and indifferent toward life interests of average individual. No deep interests of any sort

9. Energy level

- 0 Strong drive, keen, active, alert interest in life. Liked life and had energy enough to enjoy it. Outgoing and adequate in meeting life
- 2 Moderately adequate drive, energy, interest, as described above
- 4 Moderately inadequate energy level. Tended toward submissive, passive reactions. Showed some potential to face life's problems, but would rather avoid them than expend the necessary energy
- 6 Submissive, inadequate, passive reactions. Weak grasp on life, does not go out to meet life's problems, does not participate actively, but passively accepts his lot without having the energy to help self

Appendix G and G1

French Version of the Provision of Social Relations

and

English Version of the Provision of Social Relations

PSR

Maintenant, j'aimerais en savoir plus sur vos relations avec d'autres personnes. Pour chacune des phrases suivantes, veuillez nous indiquer la réponse qui s'applique le plus en suivant l'échelle ci-dessous:

Ressemble énormément à mon expérience 1	Ressemble beaucoup à mon expérience 2	Ressemble à peu près à mon expérience 3	Ne ressemble pas tellement à mon expérience 4	Ne ressemble pas du tout à mon expérience 5
-----------------------------------------------------	---------------------------------------------------	-----------------------------------------------------	-----------------------------------------------------------	---------------------------------------------------------

1. _____ Peu importe ce qui arrive, je sais que ma famille sera toujours là si j'ai besoin d'elle.
2. _____ Quelquefois, je ne suis pas sûr(e) si je peux compter entièrement sur ma famille.
3. _____ Ma famille me laisse savoir qu'elle pense que je suis une personne de valeur.
4. _____ Les gens dans ma famille ont confiance en moi.
5. _____ Les gens dans ma famille m'aident à trouver des solutions à mes problèmes.
6. _____ Je sais que ma famille me soutiendra toujours.
7. _____ Quand je suis avec mes ami(e)s, je sais que je peux me détendre complètement et être moi-même.
8. _____ J'ai la même approche face à la vie que plusieurs de mes ami(e)s.
9. _____ Les personnes qui me connaissent ont confiance en moi et me respectent.
10. _____ Quand je veux sortir pour faire quelque chose, je sais que plusieurs de mes amis aimeraient faire ces choses avec moi.
11. _____ J'ai au moins un(e) ami(e) à qui je peux tout dire.
12. _____ Je me sens très proche de quelques-un(e)s de mes ami(e)s.
13. _____ Les gens qui me connaissent pensent que je suis bon dans ce que je fais.
14. _____ Mes ami(e)s prendraient de leur temps pour discuter de mes problèmes si jamais je le voulais.
15. _____ Même quand je suis avec mes ami(e)s, je me sens seul(e).

PROVISIONS OF SOCIAL RELATIONS SCALE
(self-administered)

WE WOULD LIKE TO KNOW SOMETHING ABOUT YOUR RELATIONSHIPS WITH OTHER PEOPLE. CAN YOU TELL ME HOW CLOSELY THE STATEMENT DESCRIBES YOUR RELATIONSHIPS?

1. very much like this
2. much like this
3. somewhat like this
4. not very much like this
5. not at all like this

1.	When I'm with my friends I feel completely able to relax and be myself.	1	2	3	4	5
2.	I share the same approach to life that many of my friends do.	1	2	3	4	5
3.	People who know me trust me and respect me.	1	2	3	4	5
4.	No matter what happens, I know that my family will always be there for me should I need them.	1	2	3	4	5
5.	When I want to go out to do things I know that many of my friends would enjoy doing these things with me.	1	2	3	4	5
6.	I have at least one friend that I can tell anything to.	1	2	3	4	5
7.	Sometimes I'm not sure if I can completely rely on my family.	1	2	3	4	5
8.	My family lets me know they think I'm a worthwhile person.	1	2	3	4	5
9.	I feel very close to some of my friends.	1	2	3	4	5
10.	People in my family have confidence in me.	1	2	3	4	5
11.	People in my family provide me help in finding solutions to my problems.	1	2	3	4	5
12.	People who know me think I am good at what I do.	1	2	3	4	5
13.	My friends don't take the time to talk over my problems when I need to.	1	2	3	4	5
14.	I know my family will always stand by me.	1	2	3	4	5
15.	Even when I am with my friends I feel alone.	1	2	3	4	5

Appendix H and H1

French Version of the Questionnaire of Social Support Index

and

English Version of the Questionnaire Social Support Index

QUELQUES QUESTIONS SUR VOUS ET VOS AMIS

1. A peu près combien d'amis avez-vous -- des gens avec qui vous faites des choses, des gens que vous connaissez assez bien?

_____ amis.

2. Dans le dernier mois, combien de fois avez vous rencontré un(e) ou plusieurs de vos ami(e)s?

Vos amis vous ont visité
à la maison _____
fois.

Vous avez rencontré vos amis
en dehors de votre maison
_____ fois.

4. Vous appartenez ou êtes membré de combien de clubs ou organisations (par exemple: club de jardinage, groupe d'église, comité de parents, équipe de quilles, etc.)?

ACTIVITES FAMILIALES

1. Durant le mois dernier, combien de fois avez-vous visité votre famille?

Des membres de la famille m'ont
visité à la maison _____
fois.

J'ai rencontré des membres
de ma famille en dehors
de chez-mois _____ fois.

3. Combien de fois assistez-vous aux services religieux?
(encerclez)

Jamais	1 ou 2 fois par année	Tous les mois ou à peu près (plu- sieurs fois par année)	1 ou 2 fois par mois	Chaque semaine	Plus qu'une fois par semaine
1	2	3	4	5	6

13. Quand vous avez un problème, est-ce que vous en discutez avec ces personnes? (Répondez oui ou non pour chacun).

Oui	Non	
_____	_____	Un(e) ami(s) proche
_____	_____	Psychiatre ou psychologue
_____	_____	Deux amis ou plus
_____	_____	Avocat
_____	_____	Prêtre, ministre rabbin ou autre membre de clergé
_____	_____	Conseiller matrimonial
_____	_____	La famille ou un parent
_____	_____	Votre employeur

Autre _____ (spécifiez)

QUESTIONNAIRE OF SOCIAL SUPPORT INDEX

SOME QUESTIONS ABOUT YOU AND YOUR FRIENDS.

1. About how many friends do you have--people with whom you do things, people who you know more than just casually?

_____ friends

2. During the last month, how often did you get together with one or more friends?

Friends visited at your home _____ times. Got together with friends outside your home _____ times.

4. How many clubs and organizations (for example, garden club, church group, union PTA, bowling team) do you belong to?

_____ clubs and organizations

FAMILY ACTIVITIES

1. During the last month, how often did you visit with relatives?

Relatives visited _____ times at your home Visited with relatives _____ times outside of your home

3. How often do you attend religious services?

Never	1 or 2 per year	Every month or so (several times a year	1 or 2 per month	Every week	More than once a week
1	2	3	4	5	6

13. When you have a problem do you discuss it with any of the following people? (Check all that apply)

Yes	No	
___	___	One close friend
___	___	Two or more friends
___	___	Priest, minister, rabbi or other clergy
___	___	Family or relatives
___	___	Psychiatrist or psychologist
___	___	Lawyer
___	___	Marriage counsellor
___	___	Your employer
___	___	Other (please specify) _____

Appendix I and II

French Version of the Short Marital Adjustment Test

and

English Version of the Short Marital Adjustment Test

NOM _____

TEST D'AJUSTEMENT MARITAL

1. Faites une croix sur un des points de l'échelle ci-dessous, cela traduisant le degré de bonheur, à tout considérer, de votre présent mariage. Le point milieu " heureux " représente le point de bonheur que la plupart des gens retirent de leur mariage. L'échelle descend graduellement sur un côté pour les quelques-uns qui sont très malheureux en mariage. Elle va de l'autre côté pour les quelques-uns qui font l'expérience d'un extrême jouissance de félicité dans leur mariage.

x	x	x	x	x	x	x
Très Malheureux			Heureux			Parfaitement Heureux

Etablissez une estimation approximative sur l'accord ou le désaccord entre vous et votre conjoint sur les items suivants.
S.V.P. cochez dans " une " colonne seulement pour chaque question.

	Occasion-		Presque
	Presque	nuellement	Toujours
Toujours	Toujour	en	en
d'accord	d'accord	desaccord	desaccor. desacc

2. Gérer le budget de la famille						
3. Questions de récréation						
4. Démonstrations d'affection						
5. Les amis						
6. Relations sexuelles						
7. Conventions: bon juste, conduite propre						
8. Philisophie de la vie						
9. Manière de s'arranger avec les beaux-parents						

10. Quand des désaccords s'élèvent, cela a généralement pour résultat que: le mari cède _____, l'épouse cède _____, l'accord se fait par concessions mutuelles _____.
11. Vous et votre conjoint vous engagez-vous dans des intérêts extérieurs ensemble? Tous _____, quelques-uns d'entre eux _____, très peu d'entre eux _____, aucun d'entre eux _____.
12. Durant vos moments de loisirs, préférez-vous généralement: aller "trotter" ailleurs _____, rester à la maison _____? Votre conjoint préfère-t-il généralement: aller "trotter" ailleurs _____, rester à la maison _____?
13. Avez-vous déjà souhaité ne vous être jamais marié(e)? Fréquemment _____, occasionnellement _____, rarement _____, jamais _____.
14. Si vous aviez à refaire votre vie, pensez-vous que vous: épouseriez la même personne _____, épouseriez une personne différent _____, ne vous marieriez pas du tout _____?
15. Vous confiez-vous à votre conjoint: presque jamais _____, rarement _____, dans beaucoup de cas _____, dans tous les cas _____?

12. In leisure time do you generally prefer: to be "on the go" _____, to stay at home _____? Does your mate generally prefer: to be "on the go" _____, to stay at home _____?
13. Do you ever wish you had not married? Frequently _____, rarely _____, never _____.
14. If you had your life to live over, do you think you would: marry the same person _____, marry a different person _____, not marry at all _____?
15. Do you confide in your mate: almost never _____, rarely _____, in most things _____, in everything _____.

Appendix J and J1

French Version of the Rochester Research Obstetrical Scale

and

English Version of the Rochester Research Obstetrical Scale

ROCHESTER RESEARCH OBSTETRICAL SCALE (ROS)

échelle prénatale

1. Jeune mère (première grossesse < 16 ans, plusieurs grossesses < 18 ans). _____
2. Mère âgée (> 35 ans). _____
3. Plusieurs naissances (> 6). _____
4. Avortements (> 2). _____
5. Médication chronique (en excluant les vitamines). _____
6. Problèmes physiques (maladie chronique ou infections, 1 point chaque jusqu'à 4 points). _____

SCORE PRÉNATAL _____

échelle d'accouchement

7. Césarienne (prévue=1 point, imprévue=2 points). _____
8. Provocation. _____
10. Présentation (pas par la tête). _____
11. Cordon ombilical (noué, avec une hernie, serré autour de cou). _____
14. Gestations multiples. _____
15. Forceps (bas=1 pt, moyen ou élevé=2 pts). _____
17. Anesthésie (>locale ou des parties génitales=1 point, générale=2 points). _____
18. Long travail (première grossesse: stade 1>20 hres ou stade 2>2 hres).
(autres grossesses: stade 1>20 hres ou stade 2>2 hres). _____
19. Court travail (première grossesse: stade 1>3 hres ou stade 2>10 minutes).
(autres grossesses: stade 1>2 hres ou stade 2>10 minutes). _____

SCORE D'ACCOUCHEMENT _____

échelle du nouveau-né

- 20. Poids à la naissance bas (< 2500 grammes) et/ou naissance prématurée. _____
- 21. Battements de coeur du foetus peu élevés (2 pts). _____
- 22. Battements de coeur après l'accouchement (<100). _____
- 23. Réanimation nécessaire. _____
- 24. Apgar à 5 minutes < 8. _____
- 25. Anomalies physiques flagrantes (2 points). _____
- 26. Bébé mort-né ou après l'accouchement (< 30 jours).
(3 points). _____
- 27. Problèmes physiques (1 point chaque jusqu'à
3 points). _____

SCORE DU NOUVEAU-NÉ _____

Score total = (somme des scores prénatal, d'accouchement et du nouveau-né).

SCORE TOTAL _____

Quand tu étais enceinte, vivais-tu avec quelqu'un?

Étais-tu mariée?

Rochester Research Obstetrical Scale (RROS)*

(Each Item Scores 1 Point Unless Otherwise Indicated)

Prenatal Scale

1. Young mother (primigravida<16 yrs, multigravida<18) _____
2. Old mother >35 yrs) _____
3. Grand multiparity (>6) _____
4. Abortions (>2) _____
5. Chronic medication (exclude vitamins) _____
6. Physical disorders (chronic disease or infections, 1 pt each up to 4 pts) _____

PRENATAL SCORE _____

Delivery Scale

7. C-section (planned = 1 pt, unplanned = 2 pts) _____
8. Induction _____
9. Premature rupture of membranes _____
10. Presentation (not vertex) _____
11. Cord (knotted, prolapsed, or tight around neck) _____
12. Placenta problem _____
13. Amniotic fluid (turbid = 1 pt, bloody = 2 pts) _____
14. Multiple gestation _____
15. Forceps (low = 1 pt, mid or high = 2 pts) _____
16. Analgesia >50 mg. = 1 pt.; 100 mg = 2 pts) _____
17. Anaesthesia local or pudental block = 1 pt, general = 2 pts) _____
18. Long labor (Primigravida: Stage 1>20 hrs or Stage 2>2 hrs)
(Multigravida: Stage 1>20 hrs or Stage 2>2 hrs) _____

19. Short labor (Primigravida: Stage 1>3 hrs or Stage 2>10 mins) _____
 (Multigravida: Stage 1>2 hrs or Stage 2>10 mins) _____
DELIVERY SCORE _____

Infant Scale

20. Birthweight low (<2500 grams) and/or premature birth _____
 21. Fetal heart rate low (2 pts.) _____
 22. Neonatal heart rate (<100) _____
 23. Resuscitation necessary _____
 24. Apgar at 5 min<8 _____
 25. Gross physical anomaly (2 pts) _____
 26. Fetal or neonatal death (<30 days), (3 pts) _____
 27. Physical disorders (1 pt each up to 3 pts) _____
INFANT SCORE _____

Total Score = (Sum of Prenatal, Delivery, and Infant Scores)

TOTAL SCORE _____

*Sameroff, A.J., Seifer, R., & Zax, M. (1982). Early Development of Children at Risk for Emotional Disorder. Monographs of the Society for Research in Child Development. (Whole No. 47.

Appendix K and K1

French Version of the Concepts of Development Questionnaire

and

English Version of the Concepts of Development Questionnaire

QUESTIONNAIRE DE CONCEPTS DE DÉVELOPPEMENT

Dans ce questionnaire, nous vous demandons vos opinions sur différents aspects de l'éducation des enfants. S'il-vous-plait, donnez vos propres opinions et ne vous préoccupez pas de ce que les autres peuvent penser. Vous serez probablement d'accord avec certaines affirmations et en désaccord avec d'autres. Il n'y a pas de bonnes ou de mauvaises réponses puisqu'elles sont toutes matière à opinions. De plus, vos réponses demeurent confidentielles.

Lisez chaque item attentivement et quand vous êtes certain d'avoir bien compris, placez un X dans l'espace qui exprime le mieux votre sentiment à propos de l'item. Ne passez pas trop de temps à chacun des items. Essayez de répondre à toutes les questions.

		fortement en désaccord		en désaccord		d'accord		fortement d'accord
1. Les enfants doivent être traités différemment à mesure qu'ils vieillissent.	<	>	<	>	<	>	<	>
2. Les parents doivent conserver leurs règlements et leur standards peu importe la personnalité de leur enfant.	<	>	<	>	<	>	<	>
3. Il n'est pas facile de définir ce qu'est un bon foyer car cela est fait de beaucoup de choses différentes.	<	>	<	>	<	>	<	>
4. Les pères ne peuvent pas élever leurs enfants aussi bien que les mères.	<	>	<	>	<	>	<	>
5. L'espièglerie d'un enfant de deux ans est un stade dont il sortira en vieillissant.	<	>	<	>	<	>	<	>
6. Un enfant qui n'est pas propre à trois ans a sûrement quelque chose qui ne vas pas.	<	>	<	>	<	>	<	>
7. Les parents doivent être attentifs aux besoins de leurs enfants.	<	>	<	>	<	>	<	>

- | | | | | | | | | | |
|-----|--------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|
| 8. | Il est beaucoup plus facile de prendre soin d'un bébé fille que q'un bébé garçon. | < | > | < | > | < | > | < | > |
| 9. | Les bébés difficiles s'amélioreront en vieillissant. | < | > | < | > | < | > | < | > |
| 10. | Il n'y a pas grand chose à faire pour aider un enfant perturbé émotionnellement. | < | > | < | > | < | > | < | > |
| 11. | Les problèmes des enfants ont rarement une seule cause. | < | > | < | > | < | > | < | > |
| 12. | Dans la famille le rôle du père est de voir à la discipline le rôle de la mère est de procurer amour et attention aux enfants. | < | > | < | > | < | > | < | > |
| 13. | Les parents peuvent être contrariés par un enfant capricieux au point de ne pouvoir être aussi gentils qu'ils le voudraient. | < | > | < | > | < | > | < | > |
| 14. | Les succès scolaires d'un enfant dépendent de comment la mère lui aura enseigné à la maison. | < | > | < | > | < | > | < | > |
| 15. | Il n'y a pas seulement une bonne façon d'élever les enfants. | < | > | < | > | < | > | < | > |
| 16. | Les bébés garçon sont moins affectueux que les bébés filles. | < | > | < | > | < | > | < | > |
| 17. | Dans une famille, les aînés sont habituellement traités différemment des plus jeunes. | < | > | < | > | < | > | < | > |
| 18. | Un bébé facile grandira en devenant un bon enfant. | < | > | < | > | < | > | < | > |
| 19. | Les parents changent en fonction de leurs enfants. | < | > | < | > | < | > | < | > |
| 20. | On doit apprendre aux enfants à bien se comporter sinon ils tourneront mal. | < | > | < | > | < | > | < | > |

Concepts of Development Questionnaire

Arnold J. Sameroff and Leslie A. Feil
University of Illinois at Chicago Circle

This questionnaire asks for your opinions about different aspects of child-rearing. Please give your own opinions and do not worry about what others may think. You will probably agree with some statements and disagree with others. There are no right or wrong answers to these questions since they are all matters of opinion. In addition, your answers will be treated with complete confidentiality.

Read each item carefully and, when you are sure you understand it, place an X in the space which best expresses your feelings about the statement. Do not spend much time on any item. Try to answer every question.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Children have to be treated differently as they grow older.	< >	< >	< >	< >
2. Parents must keep to their standards and rules no matter what their child is like.	< >	< >	< >	< >
3. It is not easy to define a good home because it is made up of many different things.	< >	< >	< >	< >
4. Fathers cannot raise their children as well as mothers.	< >	< >	< >	< >
5. The mischief that 2-year-olds get into is part of a passing stage they'll grow out of.	< >	< >	< >	< >
6. A child who isn't toilet-trained by 3 years of age must have something wrong with him.	< >	< >	< >	< >
7. Parents need to be sensitive to the needs of their children.	< >	< >	< >	< >
8. Girls tend to be easier babies to take care of than are boys.	< >	< >	< >	< >
9. Difficult babies will grow out of it.	< >	< >	< >	< >

10. There's not much anyone can do to help emotionally disturbed children. < > < > < > < >
11. Children's problems seldom have a single cause. < > < > < > < >
12. The father's role is to provide the discipline in the family and the mother's role is to give love and attention to the children. < > < > < > < >
13. Parents can be turned off by a fussy child so that they are unable to be as nice as they would like. < > < > < > < >
14. A child's success at school depends on how much his mother taught him at home. < > < > < > < >
15. There is no one right way to raise children. < > < > < > < >
16. Boy babies are less affectionate than girl babies. < > < > < > < >
17. First-born children are usually treated differently than are later-born children. < > < > < > < >
18. An easy baby will grow up to be a good child. < > < > < > < >
19. Parents change in response to their children. < > < > < > < >
20. Babies have to be taught to behave themselves or they will be bad later on. < > < > < > < >

Appendix L and L1

French Version of the Home Observation for the Measurement
of the Environment (Birth to Three Version)

and

English Version of the Home Observation for the Measurement
of the Environment (Birth to Three Version)

HOME (de la naissance à trois ans)

	OUI	NON
1- Mother spontaneously vocalizes to child at least twice during visit (excluding scolding).	—	—
2- Mother responds to child's vocalizations with a verbal response.	—	—
3- Mother tells child the name of some object during visit or says name of person or object in a "teaching" style.	—	—
4- Mother's speech is distinct, clear, and audible.	—	—
5- Mother initiates verbal interchanges with observer --- asks questions, makes spontaneous comments.	—	—
6- Mother expresses ideas freely and easily and uses statements of appropriate length for conversation (e.g., gives more than brief answers).	—	—
7- Permettez-vous quelques fois à X de jouer avec des choses qui le salissent comme du sable, de la boue, de l'eau, de la nourriture ou de la peinture à doigt (gouache)?	—	—
8- Mother spontaneously praises child's qualities or behaviour twice during visit.	—	—
9- When speaking of or to child, mother conveys positive feeling.	—	—
10- Mother caresses or kisses child at least once during visit.	—	—
11- Mother shows some positive emotional responses to praise of child offered by visitor.	—	—
12- Mother does not shout at child during visit.	—	—
13- Mother doesn't express overt annoyance with or hostility toward child.	—	—
14- Mother neither slaps nor spansks child during visit.	—	—
15- En repensant à la semaine passée, combien de fois avez-vous puni X physiquement?	—	—
16- Mother does not scold or derogate child during visit.	—	—
17- Mother does not interfere with child's actions or restrict child's movements more than three times during visit.	—	—

- | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 18- Quel genre de livres avez-vous dans la maison? | — | — |
| 19- Family has a pet. | — | — |
| 20- Avez-vous une (des) gardienne(s) régulière(s) pour X? Sinon, quels arrangements avez-vous? | — | — |
| 21- Est-ce que vous ou quelqu'un d'autre amenez parfois X au magasin (qu'il soit de n'importe quel type)? Combien de fois cela se produit-il? (1x/sem) | — | — |
| 22- Est-ce que X sort souvent de la maison, par exemple dans la cour, en métro, pour une promenade en auto? Combien de fois par semaine? (4x/sem) | — | — |
| Avez-vous un pédiatre ou un médecin pour enfants? | — | — |
| 23- Comment souvent X va-t-il chez le médecin ou à la clinique pour des examens de routine? (tous les mois jusqu'à 9 mois puis 1x/6 mois par la suite) | — | — |
| Quand est la dernière fois que vous avez vu votre médecin ou pédiatre? | | |
| 24- Est-ce que X a un endroit spécial où il peut mettre ses jouets ou ses "trésors"? | — | — |
| 25- Child's play environment appears safe and free of hazards. | — | — |
| 26- Child has some muscle activity toys or equipment. | — | — |
| 27- Child has push or pull toy. | — | — |
| 28- Child has stroller or walker, kiddie car, scooter, or tricycle. | — | — |
| 29- Mother provides toys or interesting activities for child during interview. | — | — |
| 30- Provides learning equipment appropriate to age: cuddly toy or role-playing toys. | — | — |
| 31- Provides learning equipment appropriate to age: mobile, table and chairs, high chair, play pen. | — | — |
| 32- Provides eye-hand coordination toys: items to go in and out of receptacle, fit together toys, beads. | — | — |
| 33- Provides eye-hand coordination toys that permit combinations: stacking or nesting toys, blocks or building toys. | — | — |
| 34- Provides toys for literature or music. | — | — |

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 35- Mother tends to keep child within visual range and to look at him often. | — | — |
| 36- Est-ce que vous parlez à X quand vous avez à faire la vaisselle ou le ménage? | — | — |
| 37- Est-ce que vous encouragez X à essayer de manger tout (e) seul (e), à atteindre un jouet hors de sa portée, bref à faire des choses qui sont difficiles pour lui/elle? | — | — |
| 38- Quand X reçoit un nouveau jouet, est-ce que vous vous assoyez et jouez avec lui/elle en lui montrant comment fonctionne le nouveau jouet ou bien vous le/la laissez explorer et apprendre par lui/elle-même? | — | — |
| 39- Est-ce que vous procurez à X des jouets, des suggestions de jeux, lui organisez-vous des périodes d'activités? | — | — |
| 40- Mother provides toys that challenge child to develop new skills. | — | — |
| 41- Est-ce que le père de X (ou une figure paternelle) prend soin, à certains moments de la journée, de lui/elle tous les jours? | — | — |
| 42- Aimes-vous lire des histoires à X? Combien de fois par semaine en lisez-vous? (3x/sem) | — | — |
| 43- Habituellement, faites-vous manger X avant vous ou est-ce que vous et votre mari (ami) mangez avec lui/elle au moins une fois par jour? | — | — |
| 44- Etes-vous capable de visiter votre famille ou parenté ou vous visitent-ils? A peu près combien de fois? (1x/mois) | — | — |
| 45- Child has three or more books of his own. | — | — |

1- Avez-vous des inquiétudes à propos du développement de votre enfant?

2- Qu'est-ce que vous avez fait face à ces inquiétudes?
(Consulter quelqu'un, parler à quelqu'un?)

HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT

INVENTORY (Birth to Three)

I. EMOTIONAL AND VERBAL RESPONSIVITY OF MOTHER	YES	NO
1. Mother spontaneously vocalizes to child at least twice during visit (excluding scolding)	—	—
2. Mother responds to child's vocalizations with a verbal response.	—	—
3. Mother tells child the name of some object during visit or says name of person or object in a "teaching" style.	—	—
4. Mother's speech is distinct, clear, and audible.	—	—
5. Mother initiates verbal interchanges with observer--asks questions, makes spontaneous comments.	—	—
6. Mother expressed ideas freely and easily and uses statements of appropriate length for conversation (e.g., gives more than brief answers).	—	—
*7. Mother permits child occasionally to engage in "messy" types of play.	—	—
8. Mother spontaneously praises child's qualities or behaviour twice during visit.	—	—
9. When speaking of or to child, mother's voice conveys positive feeling.	—	—
10. Mother caresses or kisses child at least once during visit.	—	—
11. Mother shows some positive emotional responses to praise of child offered by visitor.	—	—

SUBSCORE

II. AVOIDANCE OF RESTRICTION AND PUNISHMENT

12. Mother does not shout at child during visit.	—	—
13. Mother doesn't express overt annoyance with or hostility toward child.	—	—
14. Mother neither slaps nor spansks child during visit.	—	—

- | | | |
|----------------------------------------------------------------------------------------------------------------------|----------|---|
| 30. Provides learning equipment appropriate to age--cuddly toy or role-playing toys. | — | — |
| 31. Provides learning equipment appropriate to age--mobile, table and chairs, high chair, play pen. | — | — |
| 32. Provides eye-hand coordination toys--items to go in and out of receptacle, fit together toys, beads. | — | — |
| 33. Provides eye-hand coordination toys that permit combinations--stacking or nesting toys, blocks or building toys. | — | — |
| 34. Provides toys for literature or music. | — | — |
| | SUBSCORE | |
| | _____ | |

V. MATERNAL INVOLVEMENT WITH CHILD

- | | | |
|------------------------------------------------------------------------------|----------|---|
| 35. Mother tends to keep child within visual range and to look at him often. | — | — |
| 36. Mother "talks" to child while doing her work. | — | — |
| 37. Mother consciously encourages developmental advances. | — | — |
| 38. Mother invests "maturing" toys with value via her attention. | — | — |
| 39. Mother structures child's play periods. | — | — |
| 40. Mother provides toys that challenge child to develop new skills. | — | — |
| | SUBSCORE | |
| | _____ | |

VI. OPPORTUNITIES FOR VARIETY IN DAILY STIMULATION

- | | | |
|------------------------------------------------------------------|---|---|
| 41. Father provides some caretaking every day. | — | — |
| 42. Mother reads stories at least three times weekly. | — | — |
| 43. Child eats at least one meal per day with mother and father. | — | — |
| 44. Family visits or receives visits from relatives. | — | — |

45. Child has three or more books of his own.

— —

SUBSCORE

—

TOTAL SCORE

—

*Can ask mother to answer these questions.

Appendix M and M1

**French Version of the Home Observation for the Measurement
of the Environment (Three to Six Version)**

and

**English Version of the Home Observation for the Measurement
of the Environment (Three to Six Version)**

HOME (3 à 6 ans)

	OUI	NON
1- Toys to learn colors and sizes and shapes: pressouts, play school, pegboards, etc.	—	—
2- Three or more puzzles.	—	—
3- Record player and at least five children's records.	—	—
4- Toy or game permitting free expression (finger paints, play dough, crayons or paint and paper, etc.)	—	—
5- Toys or game necessitating refined movements (paint by numbers, dot book, paper dolls, crayons and coloring books).	—	—
7- Ten children's books.	—	—
8- Aimes-vous lire quand vous avez du temps libre? Empruntez-vous les livres à la bibliothèque ou bien les achetez-vous?	—	—
9- Est-ce que vous ou votre partenaire lisez le journal tous les jours?	—	—
10- Etes-vous abonnés à une revue?	—	—
11- X sait-il déjà reconnaître les formes? Par exemple, sait-il(elle) qu'une balle est ronde, etc.? Est-ce que vous passez du temps avec lui/elle quand il/elle joue ou dessine pour lui apprendre à reconnaître les formes?	—	—
12- X sait-il/elle déjà différencier quelques animaux? Est-ce qu'il/elle a des jeux, des livres, des casse-têtes, etc. pour ça?	—	—
13- X a-t-il/elle déjà commencé à apprendre les lettres de l'alphabet? Est-ce que c'est vous qui lui avez montré? De quelle façon?	—	—
14- A l'école, les professeurs ont toutes sortes de valeurs: il y a ceux qui mettent l'accent sur la politesse, les bonnes manières; d'autres essaient de montrer à partager, à ne pas se battre, à dire "s'il-vous-plait", "je m'excuse." Pour vous, qu'est-ce qui est important de montrer à X à son âge? Avez-vous commencé à lui montrer? De quelle façon?	—	—
15- Mother uses correct grammar and pronunciation.	—	—

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 16- Est-ce que X vous raconte souvent ses expériences comme ses jeux avec ses petit(e)s ami(e)s, etc? Lui posez-vous des questions pour savoir ce qu'il a fait et pour l'encourager à parler de ses expériences? | — | — |
| 17- When speaking of or to child, mother's voice conveys positive feeling. | — | — |
| 18- Des fois, demandez-vous à X ce qu'il voudrait manger pour déjeuner ou pour dîner? Est-il/elle prêt(e) à manger ce que vous lui préparez ou vous dit-il/elle ce qu'il/elle veut? Est-ce qu'il/elle mange ce que vous lui donnez qu'il/elle aime ça ou non? | — | — |
| 19- Building has no potentially dangerous structural or health defect (e.g., plaster coming down from ceiling, stairway with board missing, rodents, etc.). | — | — |
| 20- Child's outside play environment appears safe and free of hazards. (No outside play area requires an automatic "no"). | — | — |
| 21- The interior of the apartment is not dark or perceptably monotonous. | — | — |
| 22- Neighborhood has trees, grass, birds...is aesthetically pleasing. | — | — |
| 23- There is at least 100 square feet of living space per person in the house. | — | — |
| 24- In terms of available floor space, the rooms are not overcrowded with furniture. | — | — |
| 25- All visible rooms of the house are reasonably clean and minimally cluttered. | — | — |
| 26- Est-ce que vous ou votre mari prenez X dans vos bras pour lui parler, pour regarder la télé, pour lui raconter une histoire, etc? Faites-vous ça régulièrement? | — | — |
| 27- Mother converses with child at least twice during visit (scolding and suspicious comments not counted). | — | — |
| 28- Mother answers child's questions or requests verbally. | — | — |
| 29- Mother usually responds verbally to child's talking. | — | — |
| 30- Mother spontaneously praises child's qualities or behavior twice during visit. | — | — |

- 31- Mother caresses, kisses or cuddles child at least once during visit. — —
- 32- Mother sets up situations that allows child to show off during visit. — —
- 33- Est-ce que X sait déjà différencier certaines couleurs? Est-ce que c'est vous qui lui avez montré? De quelle façon? — —
- 34- Est-ce que X connaît des chansons, des comptines, des poèmes ou des commerciaux de télé? Où a-t-il/elle appris cela? — —
- 35- Est-ce que X sait déjà différencier les relations spatiales? Quand vous lui dites: prends ton jouet sur la table et mets le dans la boîte, est-ce que X sait quoi faire avec le jouet? Est-ce que c'est vous qui lui avez appris ces relations spatiales? — —
- 36- Est-ce que X sait déjà compter? Est-ce que c'est vous qui lui avez montré? De quelle façon? — —
- 37- Est-ce que X sait déjà lire quelques mots? Est-ce que c'est vous qui lui avez appris? De quelle façon? — —
- 38- Est-ce que X mange à chaque fois qu'il/elle a faim ou s'il/elle attend l'heure des repas? — —
- 39- Je suis certaine que vous trouvez que la télévision est d'une bonne compagnie dans une maison. Chez-vous, la télé est-elle ouverte toute la journée ou bien seulement pour des programmes spéciaux? — —
- 40- Mother introduces interviewer to child. — —
- 41- Est-ce que X devient parfois en colère contre vous ou contre ses jouets ou des objets de la maison? Quand cela arrive-t-il? — —
- 42- Peut-il/elle devenir assez en colère pour qu'il/elle vous frappe? Comment pensez-vous qu'une mère doit réagir quand de telles choses se produisent? — —
- 43- Real or toy musical instrument (piano, drum, toy xylophone or guitar, etc.) — —
- 44- Est-ce que X est sorti avec un membre de la famille le mois passé soit pour aller en pique-nique, au parc, au zoo, magasiner, etc? Si oui, combien de fois? — —

- 45- Durant l'année qui vient de passer, est-ce que X a fait un voyage d'une distance d'au moins 50 miles (80 kms)? Avec qui? — —
- 46- Est-ce que X est allé dans un musée, qu'il soit de n'importe quel genre, durant l'année qui vient de passer? Avec qui? — —
- 47- Quand X a fini de jouer, est-ce que c'est vous qui rangez ses jouets ou bien lui demandez vous chaque jour qu'il/elle le fasse tout(e) seul(e)? Considérez-vous que cela doit être fait par lui/elle ou par vous? — —
- 48- Mother uses complex sentence structure and some long words in conversing. — —
- 49- Quand X dessine ou colorie, à la maison, à l'école ou à la garderie, qu'est-ce qu'il/elle aime faire de ses dessins? Les accrocher dans la maison? Y-a-t-il un endroit spécifique dans la maison où X peut afficher ses dessins? — —
- 50- Habituellement, est-ce que vous faites manger X avant tout le monde ou bien mange-t-il avec le rests de la famille? — —
- 51- Je parie que X voit beaucoup de produits annoncés à la télé. Est-ce qu'il/elle veut ces produits quand vous allez au magasin avec lui/elle? Puisque le prix des aliments est si élevé, pouvez-vous vous permettre de lui laissez choisir certains de ces produits? — —
- 52- Mother does not scold (yell) or derogate child more than once during visit. — —
- 53- Mother does not use physical restraint, shake, grab, or pinch child during visit. — —
- 54- Mother neither slaps or spanks child during visit. — —
- 55- En repensant à la semaine passée, combien de fois avez-vous puni X physiquement? — —

1- Avez-vous des inquiétudes à propos du développement de votre enfant?

2- Qu'est-ce que vous avez fait face à ces inquiétudes?
(Consulter quelqu'un, parler à quelqu'un?)

HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT

INVENTORY (Preschool)

I. STIMULATION THROUGH TOYS, GAMES, AND READING MATERIALS		YES	NO
1.	Toys to learn colors and sizes and shapes--pressouts, play school, pegboards, etc.	—	—
2.	Three or more puzzles.	—	—
3.	Record player and at least five children's records.	—	—
4.	Toys or game permitting free expression (finger paints, play dough, crayons or paint and paper, etc.).	—	—
5.	Toys or game necessitating refined movements (paint by number, dot book, paper dolls, crayons and coloring books).	—	—
6.	Toys or game facilitating learning numbers (blocks with numbers, books about numbers, games with numbers, etc.).	—	—
7.	Ten children's books.	—	—
8.	At least ten books are present and visible in the apartment.	—	—
9.	Family buys a newspaper daily and reads it.	—	—
10.	Family subscribes to at least one magazine.	—	—
11.	Child is encouraged to learn shapes.	—	—
SUBSCORE		_____	
II. LANGUAGE STIMULATION			
12.	Toys to learn animals--books about animals, circus, games, animal puzzles, etc.	—	—
13.	Child is encouraged to learn the alphabet.	—	—
14.	Parent teaches child some simple manners--to say, "Please," "Thank you," "I'm sorry."	—	—
15.	Mother uses correct grammar and pronunciation.	—	—

- 16. Parent encourages child to relate experiences or takes time to listen to him relate experiences. — —
- 17. When speaking of or to child, mother's voice convey's positive feeling. — —
- 18. Child is permitted some choice in lunch or breakfast menu. — —

SUBSCORE _____

III. PHYSICAL ENVIRONMENT: SAFE, CLEAN AND CONDUCIVE TO DEVELOPMENT

- 19. Building has no potentially dangerous structural or health defect (e.g., plaster coming down from ceiling, stairway with boards missing, rodents, etc.). — —
- 20. Child's outside play environment appears safe and free of hazards. (No outside play area requires and automatic "no."). — —
- 21. The interior of the apartment is not dark or perceptibly monotonous. — —
- 22. Neighborhood has trees, grass, birds--is aesthetically pleasing. — —
- 23. There is at least 100 square feet of living space per person in the house. — —
- 24. In terms of available floor space, the rooms are not overcrowded with furniture. — —
- 25. All visible rooms of the house are reasonably clean and minimally cluttered. — —

SUBSCORE _____

IV. PRIDE, AFFECTION, AND WARMTH

- 26. Parent holds child close ten to fifteen minutes per day, e.g., during TV, story time, visiting. — —
- 27. Mother converses with child at least twice during visit (scolding and suspicious comments not counted). — —
- 28. Mother answers child's questions or requests verbally. — —

- 29. Mother usually responds verbally to child's talking. — —
- 30. Mother spontaneously praises child's qualities or behaviour twice during visit. — —
- 31. Mother caresses, kisses or cuddles child at least once during visit. — —
- 32. Mother sets up situation that allows child to show off during visit. — —

SUBSCORE _____

V. STIMULATION OF ACADEMIC BEHAVIOUR

- 33. Child is encouraged to learn colors. — —
- 34. Child is encouraged to learn patterned speech (nursery rhymes, prayers, songs, TV commercials, etc.). — —
- 35. Child is encouraged to learn spatial relationships (up, down, under, big, little, etc.). — —
- 36. Child is encouraged to learn numbers. — —
- 37. Child is encouraged to learn to read a few words. — —

SUBSCORE _____

VI. MODELLING AND ENCOURAGEMENT OF SOCIAL MATURITY

- 38. Some delay of food gratification is demanded of the child, e.g., not to whine or demand food unless within 1/2 hour of meal time. — —
- 39. Family has TV, and it is used judiciously, not left on continuously. (No TV requires an automatic "No"--any scheduling scores "Yes.") — —
- 40. Mother introduces interviewer to child. — —
- 41. Child can express negative feelings without harsh reprisal. — —
- 42. Child is permitted to hit parent without harsh reprisal. — —

SUBSCORE _____

VII. VARIETY OF STIMULATION

- 43. Real or toy musical instrument (piano, drum, toy xylophone or guitar, etc.). — —
- 44. Family members have taken child on one outing (picnic, shopping excursion) at least every other week. — —
- 45. Child has been taken by family member on a trip more than 50 miles from his home during the past year (50 mile radial distance not total distance). — —
- 46. Child has been taken by a family member to a scientific, historical, or art museum within the past year. — —
- 47. Tries to get child to pick up and put away toys after play session--without help. — —
- 48. Mother uses complex sentence structure and some long words in conversing. — —
- 49. Child's art work is displayed some place in house (anything that child makes). — —
- 50. Child eats at least one meal per day, on most days, with mother (or mother figure) and father (or father figure). (One parent families get an automatic "no"). — —
- 51. Parent lets child choose certain favorite food products or brands at grocery store. — —

SUBSCORE _____

VIII. PHYSICAL PUNISHMENT

- 52. Mother does not scold (yell?) or derogate child more than once during visit. — —
- 53. Mother does not use physical restraint, shake, grab, or pinch child during visit. — —
- 54. Mother neither slaps or spanks child during visit. — —
- 55. No more than one instance of physical punishment occurred during the past week. (accept parental report). — —

SUBSCORE _____

TOTAL SCORE _____

Appendix N and N1

French Version of the Denver Developmental Screening Test

and

English Version of the Denver Developmental Screening Test

DENVER

1. Est-ce que X sourit sans être touché?
2. Est-ce que X sourit sans que vous lui parliez ou le touchiez?
3. Est-ce que X est capable de manger un biscuit tout seul?
4. Est-ce que X agit différemment avec les étrangers qu'avec les gens qu'il connaît?
5. Comment X vous fait-il savoir qu'il(elle) veut quelque chose comme un verre d'eau ou un jouet?
6. Est-ce que X est capable de tenir un verre ou une tasse et de boire sans en en trop renverser?
7. Est-ce que X peut enlever l'un ou l'autre de ses vêtements comme son manteau, ses souliers ou ses petites culottes?
8. Est-ce que X imite des tâches ménagères comme épousseter, ou balayer?
9. Est-ce que X utilise une cuillère ou une fourchette pour manger? Comment en échappe-t-il?
10. Est-ce que X vous aide dans la maison en faisant de petites tâches comme ranger ses jouets ou aller chercher ce que vous lui demandez?
11. Est-ce que X est capable de mettre tout(e) seul(e) l'un ou l'autre de ses vêtements comme ses bas, ses petites culottes ou ses souliers?
12. Est-ce que X est capable de se laver et de se sécher les mains tout seul(e)?
13. Quand il (elle) est avec ses ami(e)s, à quel genre de jeux X joue-t-il?
14. Est-ce que X peut se faire garder facilement par quelqu'un d'autre qu'un membre de la famille sans être trop contrarié?
15. Est-ce que X peut s'habiller et se déshabiller seul? Combien d'aide lui faut-il? Sait-il reconnaître le dos de devant? Sait-il lacer ses souliers?
16. Est-ce que X est capable de boutonner ses vêtements?
17. Est-ce que X peut s'habiller sans aucune aide de votre part?
18. Est-ce que X est capable de joindre ses deux mains de cette façon? (dans le milieu du corps).
19. Est-ce que X est capable d'atteindre un jouet posé sur la table lorsqu'il (elle) est assis(e) sur vos genoux?

20. Est-ce que X est capable de prendre deux blocs (objets), un dans chaque main?
21. Est-ce que X est capable de passer un bloc (petit objet), d'une main à l'autre?
22. Est-ce que X est capable de frapper deux blocs (jouets), de cette façon?
23. Est-ce que X est capable de griffonner sur un bout de papier sans que vous l'aidiez?
24. Est-ce que X fait d'autres sons que des pleurs? Des gazouillements par exemple?
25. Est-ce que X rit sans être chatouillé?
26. Est-ce que X pousse des petits cris de joie aigus?
27. Est-ce que X dit Maman ou Papa, que ces mots s'adressent à vous ou non?
28. Est-ce que X dit maman ou papa mais cette fois-ci en s'adressant vraiment à vous?
29. Est-ce que X sait dire autre chose que Maman ou Papa? Ces mots désignent quels objets ou personnes?
30. Est-ce que X essaie d'imiter les sons que vous faites?
31. Est-ce que X est capable de combiner deux mots ou plus comme: jouer balle, vouloir lait, etc.?
32. Est-ce que X capable de vous montrer ses yeux, son nez, ses pieds, etc., si vous lui demandez?
33. Donne le bloc à maman.
Mets le bloc sur la table.
Pose le bloc sur le plancher.
34. S'il y a plusieurs cubes devant X et que vous lui demandez: qu'est-ce que c'est?, est-il (elle) capable de dire "des" cubes de façon à montrer qu'il (elle) sait qu'il y en a plusieurs?
35. Est-ce que X est capable de dire son nom et son prénom?
36. Qu'est-ce que tu fais quand tu es fatigué(e)?
Qu'est-ce que tu fais quand tu as froid?
Qu'est-ce que tu fais quand tu as faim?
37. Mets le bloc sur la table.
Mets le bloc sous la table.
Mets le bloc devant la chaise de maman.
Mets le bloc derrière la chaise de maman.
38. Est-ce que X est capable de pointer correctement trois des quatre couleurs démontrées ici?

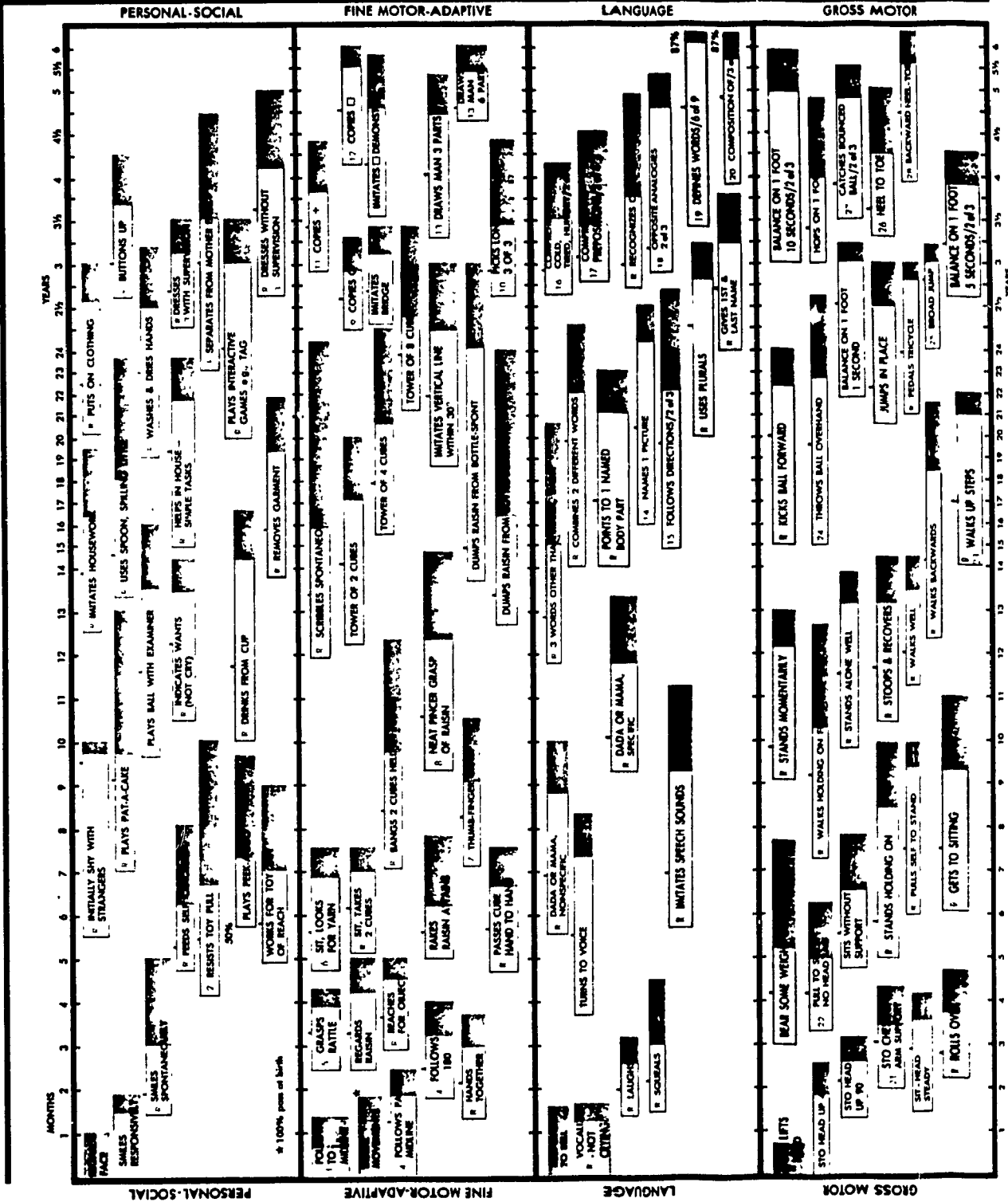
39. Le feu est chaud, la glace est _____?
Maman est une femme, papa est un _____?
Une cheval est gros, une souris est _____?
40. Je vais te dire un mot et je veux que tu m'expliques ce que c'est.
Qu'est-ce qu'une balle, un lac, un bureau, une maison, une banane,
un rideau, un plafond, une haie, de l'asphalte?
41. En quoi une cuillère est-elle faite?
En quoi un scoulier est-il fait?
En quoi une porte est-elle faite?
42. Est-ce que X est capable de lever un peu sa tête sans la tourner
quand il (elle) est couché(e) sur le ventre, de façon à ce que
son menton ne touche pas la table?
43. Est-ce que X peut passer de la position couchée sur le ventre
à la position couchée sur le dos (ou vice-versa)?
44. Est-ce que X est capable de se tenir debout en s'agrippant à
un objet?
45. Est-ce que X est capable de se mettre dans une position debout
en s'aggrepant à un objet solide?
46. Est-ce que X est capable de passer seul(e) de la position couchée
à la position assise?
47. Est-ce que X peut marcher autour des meubles en s'aggrepant à eux?
48. Est-ce que X est capable de se tenir debout seul(e) pendant au
moins deux secondes?
49. Est-ce que X est capable de se tenir debout seul(e) pendant au
moins dix secondes?
50. Quand X est debout, est-il capable de se pencher pour aller
ramasser un jouet, de se redresser, et ce, sans s'aggriper
après quelque chose ou toucher le plancher?
51. Est-ce que X peut marcher sans tomber et sans basculer d'un
côté et de l'autre?
52. Est-ce que X est capable de marcher à reculons, au moins pour
deux pas?
53. Comment X mont-t-il (elle) les marches? A quatre pattes? En
s'agrippant à une personne? En tenant la rampe ou le mur?
54. Est-ce que X est capable de donner un coup de pied sur un ballon
comme celui-ci sans devoir s'aggreper à quelque chose?
55. Est-ce que X est capable de pédaler un tricycle?

DENVER DEVELOPMENTAL SCREENING TEST

STO.=STOMACH
SIT=SITTING

PERCENT OF CHILDREN PASSING
 25 50 75 100
 May pass by report
 Test Item
 See back of form

Date
 Name
 Birthdate
 Hoop. No.



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DIRECTIONS

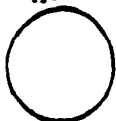
DATE

NAME

BIRTHDATE

HOEP. NO.

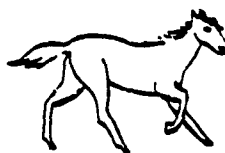
1. Try to get child to smile by smiling, talking or waving to him. Do not touch him.
2. When child is playing with toy, pull it away from him. Pass if he resists.
3. Child does not have to be able to tie shoes or button in the back.
4. Move yarn slowly in an arc from one side to the other, about 6" above child's face. Pass if eyes follow 90° to midline. (Fast midline; 180°)
5. Pass if child grasps rattle when it is touched to the backs or tips of fingers.
6. Pass if child continues to look where yarn disappeared or tries to see where it went. Yarn should be dropped quickly from sight from tester's hand without arm movement.
7. Pass if child picks up raisin with any part of thumb and a finger.
8. Pass if child picks up raisin with the ends of thumb and index finger using an over hand approach.





9. Pass any enclosed form. Fail continuous round motions.
10. Which line is longer? (Not bigger.) Turn paper upside down and repeat. (3/3 or 5/6)
11. Pass any crossing lines.
12. Have child copy first. If failed, demonstrate

When giving items 9, 11 and 12, do not name the forms. Do not demonstrate 9 and 11.

13. When scoring, each pair (2 arms, 2 legs, etc.) counts as one part.
14. Point to picture and have child name it. (No credit is given for sounds only.)



15. Tell child to: Give block to Mornie; put block on table; put block on floor. Pass 2 of 3. (Do not help child by pointing, moving head or eyes.)
16. Ask child: What do you do when you are cold? ..hungry? ..tired? Pass 2 of 3.
17. Tell child to: Put block on table; under table; in front of chair, behind chair. Pass 3 of 3. (Do not help child by pointing, moving head or eyes.)
18. Ask child: If fire is hot, ice is ?; Mother is a woman, Dad is a ?; a horse is big, a mouse is ?. Pass 2 of 3.
19. Ask child: What is a ball? ..lake? ..desk? ..house? ..banana? ..curtain? ..ceiling? ..hedge? ..pavement? Pass if defined in terms of use, shape, what it is made of or general category (such as banana is fruit, not just yellow). Pass 6 of 9.
20. Ask child: What is a spoon made of? ..a shoe made of? ..a door made of? (No other objects may be substituted.) Pass 3 of 3.
21. When placed on stomach, child lifts chest off table with support of forearms and/or hands.
22. When child is on back, grasp his hands and pull him to sitting. Pass if head does not hang back.
23. Child may use wall or rail only, not person. May not crawl.
24. Child must throw ball overhand 3 feet to within arm's reach of tester.
25. Child must perform standing broad jump over width of test sheet. (8-1/2 inches)
26. Tell child to walk forward,  heel within 1 inch of toe. Tester may demonstrate. Child must walk 4 consecutive steps, 2 out of 3 trials.
27. Bounce ball to child who should stand 3 feet away from tester. Child must catch ball with hands, not arms, 2 out of 3 trials.
28. Tell child to walk backward,  toe within 1 inch of heel. Tester may demonstrate. Child must walk 4 consecutive steps, 2 out of 3 trials.

DATE AND BEHAVIORAL OBSERVATIONS (how child feels at time of test, relation to tester, attention span, verbal behavior, self-confidence, etc.):

Appendix O
Intercorrelations of the HOME variables
and other variables used

Table 1

Intercorrelations Between Variables Used With the HOME

	SES	With z score	Aggres z-score	Years educat.	Hassles intens.
SES ^a	----				
Withdrawal z-score ^a	-.18	----			
Aggression z-score ^a	-.11	-.27	----		
Years of education ^a	.43**	-.20	-.27	----	
Hassles Intensity ^a	.04	-.34*	-.04	.21	----
Total HOME score ^a	.11	-.43*	-.15	.54**	.13
Emo. & verbal responsivity ^b	.06	-.29	-.44*	.25	.02
Avoid. of punishment ^b	.10	.09	.13	.34	-.20
Organization of environ. ^b	.21	-.36	.10	.45*	.08
Appropriate play material ^b	-.15	-.40*	-.22	.26	.35
Maternal involvement ^b	-.35	-.25	.07	.23	.05
Variety of daily stimulation ^b	.54**	-.23	-.09	.40*	.04

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

Table 1 - cont.

Intercorrelations Between Variables Used With the HOME

	Total HOME	Emo. Verbal Respon	Avoid punish	Organ. environ	Approp play material
SES ^a					
Withdrawal z-score ^a					
Aggression z-score ^a					
Years of education ^a					
Hassles Intensity ^a					
Total HOME score ^a	-----				
Emo. & verbal responsivity ^b	.58***	-----			
Avoid. of punishment ^b	.35	-.03	-----		
Organization of environ. ^b	.67***	.27	.22	-----	
Appropriate play material ^b	.64***	.31	-.21	.22	-----
Maternal involvement ^b	.58***	.11	.21	.30	.41
Variety of daily stimulation ^b	.65***	.39*	.07	.53**	.26

Note. * p<.05 ** p<.01 *** p<.001
^a based on a sample size of 38
^b based on a sample size of 28

Table 1 - cont.

Intercorrelations Between Variables Used With the HOME

	Maternal Involve.	Daily Stimul.
--	----------------------	------------------

SES^a

Withdrawal
z-score^a

Aggression
z-score^a

Years of
education^a

Hassles
Intensity^a

Total HOME
score^a

Emo. & verbal
responsivity^b

Avoid. of
punishment^b

Organization
of environ.^b

Appropriate play
material^b

Maternal involvement^b -----

Variety of daily stimulation^b .09 -----

Note. * p<.05 ** p<.01 *** p<.001
^a based on a sample size of 38
^b based on a sample size of 28

Appendix P

Intercorrelations of the Denver variables
and other variables used

Table 1

Intercorrelations Between Variables Used With the Denver

Overall (N = 38)

	Mother's age at preg.	Child's age	With z score	Aggres z-score	Total Home environ.
Mother's age at 1st pregnancy	----				
Child's age (mo)	-.36*	----			
Withdrawal z-score	.14	-.12	----		
Aggression z-score	-.58***	.13	-.27	----	
Total Home environment	.23	.04	-.41**	-.01	----
Total Failure of items	-.14	.42**	-.11	.23	-.19
Failure of Social items	-.12	.41**	-.10	.38*	-.07
Failure of Language items	.03	.31*	.21	-.10	-.23
Failure of Gross Motor	-.20	.45**	.08	.08	-.30*
Failure of Fine Motor	-.01	.42**	-.37*	.19	.09

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

Table 1 - cont.

Intercorrelations Between Variables Used With the Denver

Overall (N = 38)					
	Total Failure of items	Failure social items	Failure Lang. items	Failure gross motor	Failure fine motor
Mother's age at 1st pregnancy					
Child's age (mo)					
Withdrawal z-score					
Aggression z-score					
Total Home environment					
Total Failure of items	----				
Failure of Social items	.46**	----			
Failure of Language items	.57***	.26	----		
Failure of Gross Motor	.76***	.05	.36*	----	
Failure of Fine Motor	.76***	.24	.19	.41**	----

Note. * p<.05 ** p<.01 *** p<.001