THE UNIVERSITY OF CALGARY

COGNITIVE FACTORS IN MATERNAL-CHILD INTERACTIONS

by

LINDA JANE MATSALLA

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF PSYCHOLOGY

CALGARY, ALBERTA

June, 1988

ISBN 0-315-46622-7

THE UNIVERSITY OF CALGARY

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Cognitive Factors in Maternal-Child Interactions", submitted by Linda Jane Matsalla in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

R E Franken

Dr. R. Franken,
Department of Psychology.

Dr. M.C. Boyes,
Department of Psychology.

Dr. G. Rowland,
Department of Psychology.

R P Ferguson

Dr. R. Ferguson,
University of Victoria.

August 22 1988

ABSTRACT

The present study was undertaken to compare mothers of behavior problem and nonproblem children on their attitudes towards child behavior and discipline.

Thirty mothers of behavior problem, elementary school-aged boys, and thirty mothers of nonproblem, elementary school-aged boys, were given questionnaires which assessed the extent and types of behavior problems they perceived in their own child, their perceived level of control over their child's behavior, their attributions of causality for child behavior and their choice of disciplinary measures. Mothers' level of depression, as well as their ability to track child behavior on videotape was also measured.

Statistical analyses showed significant differences between mothers of problem and nonproblem children on the number and type of behavior problems they perceived in their own child, the number of depressive symptoms mothers report, their attributions of causality for child behavior, choice of disciplinary measures and their ability to track child behavior on videotape. Intercorrelations among the measures also showed signiticant relationships between mothers' perceived controllability of child behavior and attributions of causality for child behavior. Their attributions of causality were significantly related to levels of maternal

depression, ability to track child behavior on videotape and their choice of disciplinary measures.

The results were discussed with respect to a model for the treatment of parent-child interaction problems.

ACKNOWLEDGEMENTS

Appreciation and sincere thanks are extended to the people who were involved during the various stages of work on this thesis. Dr. Robert Franken was especially supportive, patient and tolerant during this project. Without his support and guidance this project would not have been completed. Dr. Guy Rowland's advice with statistics and computor analysis was also essential.

Sincere thanks is also extended to the administrators, teachers and parents in the Red Deer Catholic School Division who allowed me to carry on this research in their schools.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

LITERATURE REVIEW

Among pediatric populations, a primary complaint of parents at child treatment clinics is noncompliance and other disruptive behavior (Forehand and Peed, 1979; Wells and Forehand, 1980). Griest, Wells and Forehand (1979) also indicate that parent perceptions of child behavior are the primary reason for referral of children to clinics for treatment of these behavior problems. Lobitz and Johnson (1975) also found that a measure of parent labeling of the child was a better predictor of the child's referral status than the child's actual behavior, and that labelling may be affected by marital dissatisfaction, the parent's own high rate of negative behavior towards the child, and the parent's lack of acceptance of disruptive child behavior. None-the-less, two years of age marks the appearance of what many parents term problem behavior, and also marks the time that many children first enter into peer play.

The antisocial behavior disorders are the most prevalent of childhood behavior problems, and, aside from psychosis, conduct disorders in childhood have the poorest prognosis (LaGreca and Quay, 1984). These conduct disorders are

categorized into (a) Undersocialized Aggressive, (b) Socialized Aggressive, (c) Undersocialized Nonaggressive, and (d) Socialized Nonaggressive, in the DSM III (1980). The specific conduct problems typical for the two aggressive categories are identical (eg. fighting, temper tantrums, arguing, fire setting, destructiveness), as are the behaviors described in the nonaggressive categories (eg. truancy, substance abuse, running away, lying, theft). Achenbach and Edelbrock(1983) also found in their factor analytic study on parental ratings of 4- to 5-year old clinic-referred boys, that youths who are antisocial are already recognizable at the age of preschool, as are those who engage in both overt and covert antisocial behaviors. These behaviors tend to persist as the child matures, and the child is at a high risk for coming into contact with the police for delinquent acts later in life (Langner, Gersten, Wills and Simcha-Fagan, 1983). Thus, as well as providing a large case load for pediatric clinics, as the child matures, school personnel, social workers, psychologists, psychiatric personnel, and, eventually, law enforcement personnel, may become involved in the child's life. There is, therefore, a substantial body of research which attempts to delineate the factors which are related to the development of child behavior problems, to attempt to prevent the incidence of the disorder, as well as research which attempts to find methods of decreasing a child's behavior problems once they

are diagnosed.

Some researchers, such as in the psychoanalytic literature, have analyzed early maternal-infant bonding (Ainsworth et al., 1969, 1974, 1978) and separation (Bowlby, 1969, 1973) and their effects on later social, emotional and cognitive development of the child, with the underlying implication that it is the mother's behavior that is crucial to the infant's development, and the infant is a passive recipient of the mother's influence. One school of thought in the child-abuse literature also theorizes that abusive parents might have a character flaw that may cause them to lose self-control, socially isolate themselves, distort or misperceive their childrens' behavior problems or skills, or have difficulties resolving their own anger and resentment stemming from their own childhood (Parke and Collmer, 1975). Behavior modification literature has also implied that the parents' behavior is antecedent to the child's behavior, and thus, has been the major focus of modification in order to change the child's resulting behavior (Forehand et al., 1978; Taplin and Reid, 1977). However, child behavioral and emotional problems still exist in our society, so the key to child behavior problems has not been found by the years of studying mother's behavior and the influences on the child. Psychoanalysis and behavior modification have not been effective treatments for a large percentage of disturbed parent-child relationships (Firestone and Witt, 1980;

Patterson and Fleischman, 1979).

In much of the literature on parent-child relationships and parent training, it is assumed that the parents' behavior is antecedent to, and the cause of the child's antisocial behavior. It is assumed that if the parents are trained to behave differently with their children, that the antisocial child behavior can be eliminated. However, difficulties have been found with parent training procedures, in generalization of the behavior change across situations, and in the maintenance of the behavior change over time. As well, many parents terminate treatment prematurely, or fail to show any behavior change, at all.

It is purposed in this thesis that differences seen in the literature between the behaviors of parents of behavior problem children and those of nonproblem children, as well as the reasons why many parents may not benefit from parent training programs, may have a cognitive basis. It is purposed that after several years of attempting to control a child whose behavior is out-of-control (with noncompliance, aggressiveness and destructiveness), that a parent begins to feel ineffective in controlling her child and her self-esteem declines. Symptoms of depression result. It is suspected that parents begin to develop certain beliefs and expectations in regard to the causes of their child's uncontrollable behavior, which are designed to save their already low self-esteem. However, they are still

faced with the responsibility of a child whose behavior is socially inappropriate. Society's expectations do not allow the parent to give up this responsibility, so they need to find other ways of attempting to control the child's behavior. The methods they choose are authoritarian and designed to teach the child to respect rules and authority. These are society-sanctioned methods that are used in various institutions when a person is in need of control (eg. detention centers and penal institutions). However, a vicious circle develops when the parent finds that even with the use of these more powerful means of discipline their child's problem behavior continues. It is assumed that this strengthens their beliefs and expectations in regard to their child's behavior and increases the risk of more serious disturbances in the parent-child relationship.

The purpose of this thesis is to discuss the relationships between child behavior and parental attitudes and beliefs in regard to the causes of the child's behavior. It will be argued that cognitive variables affect the parents' ability to perceive prosocial child behavior, and, thus, their ability to respond positively and consistently to their child's behavior. It will also be argued that these cognitive variables may be a major reason why many parents do not benefit from parent training programs, or terminate early from them. The results will be discussed in terms of a more complex model for the treatment of

parent-child interaction problems, than is currently being used in many cases.

SOCIOECONOMIC FACTORS

There are some factors which influence parental behavior, which are much less modifiable, if at all. One of these more static factors is socioeconomic status, which is related to educational and occupational levels. Bayley and Schaefer (1960) and Lewis and Wilson (1972) found that middle-class parents tend to be less directive and controlling with their children, to use "love-oriented" psychological discipline, and are more responsive to the inner needs and states of the child, than their lower-class counterparts. Conversely, lower-class parents tend to use more directive and controlling, more coercive, power-oriented discipline, and are more concerned with the child's external behavior. Middle-class parents also enter into more verbal communication with their children than lower-class parents, although no socioeconomic status differences have been found in the expression of physical affection and physical contact (Kagan and Tulkin, 1971; Lytton, 1980).

Differences have also been found between the interactive behaviors of middle- and lower-class children. Messer and Lewis (1972) found that middle-class one-year-olds tend to vocalize more and engage in more verbal interaction, than

their lower-class counterparts. They are also more demanding of their mother's attention and company. Lytton (1980) also discusses evidence showing that children of higher educated mothers are less physically active, but produce greater amounts of speech, than children of less educated mothers. They are also reported to comply more frequently with parental demands, and have significantly higher verbal IQ's than children of less educated mothers. This greater verbal maturity has been related to differences in the mothers' interaction styles, particularly, greater verbal responsiveness to the child in middle-class families, rather than an inherited factor (Lewis and Wilson, 1972; Lytton, 1980).

PARENT CHARACTERISTICS AND CHILD BEHAVIOR

There is also a multitude of studies which attempt to delineate parental characteristics, personality variables and behaviors, which are related to child behavior and development, but these studies also tend to present these parental factors as fairly static, and the child as a passive recipient of parental influence.

Maternal-infant attachment has been defined as a variable which affects child development in many ways, and consists of various maternal behaviors. Ainsworth, Bell and Stayton (1974) and Ainsworth and Wittig (1969) found that mothers of infants who were securely attached, were rated

high on the dimensions of sensitivity- insensitivity, acceptance-rejection, cooperation-interference and accessibility-ignoring. They also showed a lack of emphasis on procedures intended to socialize their infants, yet, their interactions with their infants facilitated acquisition of socially desirable modes of behavior. Conversely, mothers low on these four dimensions, tended to have insecure maternal-infant attachments, and tended to try and fit their infants into adult-referenced schedules and to make their infants adapt to social rules. Their attempts, however, were largely unsuccessful, and their infants were slower to acquire socially desirable modes of behavior, were less compliant to maternal commands and prohibitions and showed more crying in the first year of life than infants of responsive mothers (Bell and Ainsworth, 1972).

The quality of the maternal-infant bond has also been related to differences in social-emotional and cognitive development of children. Securely attached infants have been shown to be more sociable with adult strangers (Easterbrooks and Lamb, 1979), more enthusiastic, persistent and cooperative, and more effective in play and problem- solving than insecurely attached infants (Matas, Arend and Sroufe, 1978). They also more readily use their mother as a secure base from which to explore their environment, have better developed modes of communication and are less frequently angry (Ainsworth et al., 1978).

Although attachment literature clearly defines differences in mothers' responsiveness and the resulting effects on the maternal-infant bond and the child's resulting behavior, it does not attempt to explain why certain mothers are more responsive than others; whether this may be due to genetic factors, prior learning from the mother's upbringing, or the present family situational stresses and attitudes.

Fathers' characteristics have also been investigated more recently, in regard to their influence on child development. Sex-role identification and sex-role adoption in children have been shown to be facilitated by fathers who are masculine and nurturant, as well as influential in the family (Biller, 1971,1976; Hetherington and Frankie, 1967). Fathers who spend more time with their children also have sons who are superior in academic performance to sons of fathers who spend little time with them (Blanchard and Biller, 1971). Radin (1972, 1973) also indicated that paternal nurturance was positively associated with IQ in boys, whereas, paternal restrictiveness was negatively correlated with IQ. Again, these studies did not speculate as to the reasons why some fathers chose to play an important role in their child's life and why others chose to be little involved.

Other studies have investigated parental behavior and characteristics as a unit, rather than mothers and fathers

separately. Baumrind and Black (1967) found that assertive behavior in children was associated with independence granting and verbal give and take from parents, as well as enforced demands and consistent discipline. Parental punitiveness, in this study, was associated with nonconforming and deviant behavior in boys, whereas, parents' willingness to offer justification for directives and to listen to the child were associated with competent social behavior on the part of the child.

In a later study, Baumrind (1971) found that parents of children who were the most self-reliant, self-controlled, explorative and content, were, themselves, controlling and demanding, but they were also warm, rational and receptive to the child's communications (authoritative parenting style). Parents of children who were discontent, withdrawn and distrustful, were themselves, detached and controlling, and less warm than other parents (authoritarian parenting style). Parents of the least self-reliant, explorative and self-controlled children, were themselves, noncontrolling, nondemanding, but relatively warm (permissive parenting style). Authoritative parental control, thus, was associated with indices of social responsibility, as compared to authoritarian and permissive parental control.

Parental and family psychopathology has also been related to child development and behavior in an attempt to determine the predisposing factors to child problems.

Parental psychopathology has been found to be present in parents of problem children to a significantly greater extent than in parents of nonproblem children, as is marital discord (Johnson and Lobitz, 1974; Reisinger, Frangid and Hoffman, 1976). However, it appears that marital discord is more strongly related to child behavior problems in children who have one or both parents presenting some psychological disturbance (Emery and O'Leary, 1984). Also, when there is no marital discord present in families with an affectively disturbed parent, the risk for problematic behavior is similar to that of controls. However, the behavior problems seen in children of schizophrenic parents are not related to marital discord (Emery, Weintraub and Neale, 1982). It seems, therefore, that these three variables, child behavior, parental psychopathology and marital discord, interact differently as a function of the type and severity of parental psychopathology.

Maternal depression has recently been shown to be an important variable which differentiates parents of problem children from nonproblem children (Forehand, Wells and Griest, 1980; Griest, Wells and Forehand, 1979). It has also been found to be important in determining how parents perceive the adjustment of their clinic-referred children. Bell and Harper (1977) and Egeland and Sroufe (1981) found that these parents may fail to acknowledge improvements in their child's behavior and modify their behavior

accordingly. Thus, they do not change their attitude towards their child. Maternal depression has also been found to be associated with poor treatment outcome and premature termination from treatment programs (Firestone and Witt, 1980; Patterson, 1974a).

Other studies analyzing parental behavior have shown differences between the behavior of parents of problem and nonproblem children. Forehand, Wells and Sturgis (1978) found that the frequency of beta commands (vague or interrupted commands to which the child could not comply) shown in the laboratory situation, related negatively to child compliance, and the frequency of rewards related positively to child compliance in the home. Johnson and Lobitz (1974) reported that an increase in parental commands and negative responses was associated with an increase in the level of deviancy manifested by nonclinic children. Forehand et al. (1975) also found that mothers of clinic children issued more commands and criticized their children more during free play than mothers of nonclinic children. Clinic children also showed lower rates of compliance to their mothers' commands. Taplin and Reid (1977) found that parents of problem children were significantly more likely to provide positive consequences for deviant behavior and punish prosocial behavior in their children than parents of nonproblem children. Others have also found negative correlations between the use of parental directiveness,

control and commands with their children, and the rate of child compliance (Forehand and Scarboro, 1975; Messer and Lewis, 1972; Williams and Forehand, 1984).

Recent data has been unable to demonstrate significant personality variables that distinguish parents of abusive and nonabusive families with problem children; however, parents in both types of distressed families tend to show more anger, isolation, fear of external control, poor family history, more major life stresses (physical and emotional), more depression and low sense of competence, and displeasure with the parenting role. Frodi and Lamb (1980), however, showed differences in physiological measures between abusive and nonabusive parents, when viewing stressful and nonstressful infant behavior on videotape. Abusive parents showed more heart rate and skin conductance responses, more blood pressure changes and were less sympathetic, less attentive, less happy and more indifferent to the infant portrayed on the screen, than nonabusive controls. They hypothesized that child abusers displayed conditioned arousal to child behaviors that resembled previous situations they had encountered, and thus, show more emotional reactivity then controls.

This is further explained by Wolfe (1985) by using aggression literature. Berkowitz (1983) suggests that arousal, anger and aggression in humans have been linked both to situational cues and individual characteristics of the person. It is also suggested that paired association of

an aversive event (eg. a child's temper tantrum), with an otherwise neutral stimulus (eg.a child's facial expression), can result in aggressive responding in similar future events. Thus, a parent who shows more emotional reactivity (arousal, taking the form of anger) to child behavior, may, despite their intentions, react to relatively neutral child stimuli with a similar intensity of arousal, that they show to noxious child behavior. In fact, Lorber et al. (1984) found that abusive and nonabusive parents did not significantly differ in terms of their frequency of emitting aversive behaviors with their children, but abusive parents were more likely to engage in aversive behavior than prosocial behavior when they chose to interact with their children, and often responded negatively to prosocial child behavior.

These researchers who have delineated and studied parental behaviors and the effects on child development and behavior, have not attempted to determine the reasons why these parents behave in these ways or what factors have contributed to parental behaviors, psychopathology or marital discord. They have also assumed that the child is a passive recipient of influence, rather than an active participant in the relationship. Bell (1968) and Bell and Harper (1977) discuss evidence suggesting that parent-child interactions are of a bidirectional nature; that is, the child has just as much influence over the parents' behavior,

as the parents' have influence over the child.

CHILD CHARACTERISTICS AND BEHAVIOR

Some researchers have identified and studied distinctive infant temperament types which appear to be present from birth, and remain relatively stable in early childhood. Thomas and Chess (1977), Carey (1972) and Carey and McDevitt (1979) have found infant temperaments to vary in activity level, intensity, mood, rhythmicity, approach/ withdrawal, adaptability, distractibility, attention span and persistence. Cameron (1979) correlated infant temperament and incidence of child behavior problems, and found that children with difficult temperaments in the first year of life tended to show behavior problems in later childhood; however, these problems tended to be mild unless accompanied by parental pathology. Whether the parental pathology was an antecedent or consequence of the child's behavior problems was not considered, although it seems evident that there is an interaction.

Studies also show that early behavior problems seen in children at the toddler stage, persist into later life, even though mothers are often told by professionals that the child is going through a stage and will grow out of it (Olweus, 1979; Richman, Stevenson and Graham, 1982). If the child is a boy and produces a high number of conduct problem behaviors, the chance that he will continue in such a

pattern is significant, whereas, dependent, withdrawn behaviors are predictable in girls (Fagot, 1984). It is suggested that it is the behaviors parents attend to the most within each sex that are maintained, suggesting, again, an interaction effect.

There are also other studies which suggest that parental behavior may be a response to deviant child behavior, rather than an antecedent. Barkley and Cunningham (1979), Campbell (1973,1975) and Cunningham and Barkley (1978) found that mothers of impulsive boys provided more structure and suggestions about impulse-control and intervened more in a problem-solving situation, than mothers of normal boys. They gave more encouragement, as well as more criticism. However, when the impulsive boys were treated with methylphenidate (Ritalin) to reduce impulsivity, mother-child interactions changed. The mothers reduced their controlling, directive interaction style, increased attention to child compliance, and were more responsive to interactions initiated by the child. Conclusions from these studies were that mothers of impulsive children seem to possess a repertoire of effective child management skills, but tend to respond to the child's style of interaction and problem-solving. Disorganized, impulsive behavior is more likely to elicit structuring, encouragement and criticism, as the child's style of interaction is modified, the mother's interaction style changes.

The behavior of conduct-problem children has also been found to differ from that of nonproblem children in terms of the frequency and intensity of behavior, but not in the content. Patterson and Dawes (1975) indicated that, in addition to problem children exhibiting high intensity deviant behavior, they exhibit them at a much higher frequency than nonproblem children (up to 6 such behaviors per minute versus .20 to .25 deviant behaviors per minute for nonproblem children). Problem children also show much lower frequencies of positive behavior than normal children and are not as responsive to discipline from their parents as nonproblem children. Patterson (1976) showed that when coercive behaviors were punished by parents, problem children were more likely to persist in performing their deviant behavior, whereas, normal childrens' behavior was suppressed by the same intensity of punishment. The frequency of parental punishment acceleration also correlated significantly with overall rates of deviant child behavior particularly when the contingency involved a counterattack by the child.

Thus, earlier studies which present maternal or paternal characteristics as antecedent to child behaviors or the quality of maternal-infant attachment, may, in fact, be assessing more of a parental response to their child's behavior, or, at least, an interaction between the parent and child. Since parental characteristics were not assessed

prior to the birth of their child, it cannot be determined in these studies, which parental characteristics may be antecedent and which are a consequence of the child's temperament. Also, there is evidence that parental responsiveness is not static and can be modified by many factors. In Waters (1978) study, although most mothers obtained the same rating of responsiveness when their infants were 18 months old, as they did when their infants were 12 months old, there were some mothers whose ratings changed. Newberger (1977) also cites evidence showing that parental attitudes towards a child do not remain stable over time. They may change as the child changes due to maturity or environmental factors, with the addition of a new family member, may vary from child to child within the same family, as well as according to the sex of the child. This suggests that parent, child, as well as situational variables interact to affect parent-child interactions and subsequent development of the child. In fact, it can be assumed that researchers and clinicians more recently are not considering parent or child characteristics to be static, as one of the major reasons for studying parent and child variables and behaviors has been to determine how to modify them to reduce child behavior problems, improve family interactions and reduce the risks of later adolescent and adult behavior problems.

TREATMENT APPROACHES FOR PARENT-CHILD INTERACTION PROBLEMS

Since early research on parent and child behavior has tended to focus on the external, observable behaviors, recent researchers attempting to modify parent-child interactions have also analyzed mainly external, observable behaviors in both the parent and child. Some psychodynamic approaches have focused on attempting to directly modify the child's behavior in the therapist's office or on a hospital ward, assuming that the resultant changes will generalize to other settings, such as the home and school. Other approaches have emphasized the importance of generalization and maintenance of the behavior change, so have utilized the parents as the agents of the behavior change. Patterson and Fleichman (1979) explain that, although a therapist may use some techniques that directly alter the behavior of the child in the home, unless these improvements produce some alteration in the family's reaction to the child, the effects will be short-lived.

Behavioral approaches focus mainly on the observable behavior of the parent and child (Bernal et al., 1968; Nay, 1975; Patterson, Cobb and Ray, 1973). Patterson, Littman and Hinsey (1964) argue that since it is the contingencies within the child's environment that are most responsible for maintaining the child's behavior, retraining a child's parents may frequently be desirable and often necessary to

produce and maintain child behavior change. They teach parents individually, or in groups to objectively observe and collect data related to their child's behavior, increase desirable behaviors through the use of positive reinforcement and decrease undesirable behaviors through the use of punishment and withdrawal of reinforcement. Input is sometimes provided to parents of how to train family members to negotiate compromises and problem-solve (Gelfand and Hartmen, 1968; Gordon and Davidson, 1981).

Nonbehavioral, humanistic methods of parent training tend to focus on changing the parent, as well, in order to change the child, however, they focus on more internal factors, such as the parents' self-esteem (Gordon, 1970; MacNamara, 1975). Their methods focus on enhancing communication between parent and child by creating an atmosphere in the parent group in which anxiety is reduced, parents' self-esteem enhanced, and the focus is on changing parents' attitudes, as well as child behavior (Sadler and Seyden, 1976). The assumption is, however, that once the parents feel better about themselves, it is not as likely that they will respond negatively to their child, and the parent-child relationship will be enhanced. Thus, they also tend to assume that the parents' attitudes and behaviors are antecedent to the child's behavior.

DIFFICULTIES WITH PARENT TRAINING PROGRAMS

No matter what type of parent training is utilized, problems have been reported in generalization and longterm maintenance of behavior change, as well as reports of considerable subject attrition, often as high as 50% (Firestone and Witt, 1980), as well as poor treatment outcome. The reasons for poor treatment outcome relate to differences in family characteristics and living situations. Patterson (1974a) found that father-absent, low socioeconomic status and families with mothers who showed elevated clinical scores on the Minnesota Multiphasic Personality Inventory, particularly the F,K and depression scales, tended to respond poorly to dyadic behavioral parent training. Griest, Wells and Forehand (1979) also indicated that maternal depression is negatively related to treatment outcome. Firestone and Witt (1980) found that parents who terminated treatment prematurely were of lower age, IQ, educational level and socioeconomic status, and their children were younger and of lower IQ, than those who completed treatment. The former mothers also showed high scores on the Minnesota Multiphasic Personality Inventory on scales indicating more symptoms of depression, acting out, physical complaints, suspiciousness, and were less traditional in their feminine roles.

Studies that have investigated generalization and maintenance of child behavior change with direct parent

training have shown difficulties in these areas. Forehand and Atkeson (1977) found problems with generalization across settings, behaviors and time, and Peed (1976) reported limited generalization from training clinic to the untrained home settings. Patterson (1974b), Patterson et al., (1973), Patterson and Reid (1973) and Wahler (1975) also failed to find generalization across settings and behaviors with a dyadic style of parent training.

Studies show varying results concerning the longterm maintenance of behavior change. Hebert and Baer (1972) and Wahler (1975) reported maintenance of parent and child behavior change from 5 months to 2 years. Patterson et al. (1973) and Wahler (1969) found that only about 50% of their families maintained treatment gains during the year following treatment. However, Johnson and Christensen (1975) and Wahler (1980) failed to show maintenance of behavior change.

Dropouts in follow-up represent a substantial problem in determining maintenance of treatment effects. Estimates range from 9% (Forehand et al., 1979), to 36% (Johnson and Christensen, 1975) to 50% (Forehand et al., 1981), so those participating in follow-up studies may not be representative of the total sample. Kent (1976) examined Patterson's (1974) follow-up data and reported that those not participating in follow-up manifested 2.39 times more deviant behavior in baseline, than those participating in

follow-up. Forehand et al. (1981) also found that mothers who participated in follow-up perceived their children as better adjusted on an adjective checklist at post-treatment, than mothers who refused to participate in follow-up, which may have affected their willingness to participate in follow-up. Griest, Wells and Forehand (1979) indicated that parent perceptions of child behavior are the primary reason for referral to clinics for treatment of behavior problems.

In order to improve generalization and maintenance of behavior change, investigators have developed more broad-based models of parent training which include dyadic, humanistic, behavioral and family systems approaches (Gordon and Davidson, 1981). Many have found a broad-based model to be more effective in producing and maintaining behavior change across many settings (Kelly, 1978; Sadler and Seyden, 1976; Sadler et al., 1976). These studies seem to support Patterson et al.'s (1976) hypothesis that parents must acquire conflict-resolution skills to prevent the family unit from dissolving as a social system, so that adaptive behaviors are most likely to be maintained and not replaced by coercive or avoidance behavior.

Although parental characteristics have been shown to be related to effective or ineffective parenting and their response to parent training, it can be assumed that parents must possess certain attitudes and beliefs about themselves

and their child which are related to their overt parenting styles. These parent attitudes and beliefs have been studied minimally, even though cognitive variables have been investigated and implicated in the development and maintenance of many psychological disorders. It is quite possible that causal relationships may exist between parents' self-statements and irrational beliefs about themselves, their child and parenting in general, and overt parenting behaviors. Unless parent trainers address these beliefs and attitudes in their programs, rather than merely the external observable behavior of the parent or child, treatment for distressed families will continue to be incomplete.

Stollak et al. (1982) have found some support for the existence of important cognitive variables in parents. Parents' perceptual style (the extent to which a person is consistently sensitive to, and/or likely to infer negative or positive qualities in others) was shown to be related to the parents' style of interacting with their child. Negatively-biased persons tended to act in a more authoritarian manner that reflected dominance and desire for interpersonal distance, when interacting with their child. The more negative a parent's interpersonal perceptual style was, the more constrained their child's behavior was towards them, and the more the child's behavior was considered to be a problem by the parent. However, positively biased parents had difficulties resolving conflict situations with their

children.

Meichenbaum and Cameron (1974) have also argued that behavior therapists may have over-emphasized the importance of environmental consequences, and under-emphasized how subjects perceive and evaluate those consequences. In their review of the literature, they indicate that when standard behavior therapy procedures (operant and aversive conditioning, modeling and desensitization) with subjects presenting with neurotic complaints, were augmented with modification of client self-verbalizations, greater treatment efficacy, more generalization and greater persistence of treatment effects were obtained. This has not, as yet, been applied to parent training, although, evidence suggests that the cognitions of families with parent-child interaction problems may be an important variable underlying difficulties effecting and maintaining treatment changes in parent training programs. Patterson, Cobb and Ray (1973) recommended that parents' view of the child be more directly addressed in treatment in order to improve treatment effects. They provided anecdotal information showing that, in some cases, the parent maintained the deviant label in spite of the child's behavioral improvement during treatment. For instance, a father continued to think of his son as a fighter, and the father behaved towards his son in such as way that maintained the son's aggression. After treatment, the child's behavioral improvement gradually declined to match

the unchanged expectation of the parent. Griest, Wells and Forehand (1979) also found that maternal depression was more strongly associated with maternal perceptions of the child, than was the child's observed behavior.

COGNITIVE VARIABLES

Several researchers have investigated the link between cognitions, affect and behavior of individuals. One line of research has investigated the processes of orienting to, selectively attending to, and processing information (Neisser, 1976; Posner, 1978). This research indicates that the information one attends to and processes, as well as how this information is reacted to, is influenced by the hypotheses or "schemas" that one forms, based on past experience with the particular information or stimuli. Landau and Goldfried (1981) explain the notion of schemata by suggesting that schemata determine the acceptable form the new environmental information must take in order to be perceived accurately, as well as, where in the environment the person should search for this information. The type of schemata formed by an individual may, therefore, affect the kind of information that is attended to, processed and reacted to, as well as how it is reacted to. Lorber, Littman and Reid (1979) have demonstrated that the perceptual intentions a subject holds for a stimulus may affect their collection of data about the event. Snyder and Uranowitz (1978) have also found that the recall of written

information about a person, is strongly influenced by the guiding hypothesis about that person, even if the counter-hypothesis is just as strongly supported by evidence presented in the material. This was also seen in Patterson, Cobb and Ray's (1973) study in which parents maintained a deviant label for their child in spite of the child's behavioral improvement during treatment. This eventually led to deterioration of the child's behavior toward baseline. Lorber, Littman and Reid (1979) also demonstrated that the tracking ability of subjects shown videotaped sequences of deviant child behavior is affected by giving subjects either a segment of videotape of extremely deviant child behavior or relatively neutral child behavior immediately prior to tracking a common segment of child behavior. Those shown the more deviant behavior first were able to track negative behavior much easier than positive behavior and significantly better than the subjects shown the neutral child behavior segment. The authors suggest that these initial segments set up different expectations for subjects which affect tracking ability of positive behavior on videotape. This finding may also be applicable to parents of conduct disordered children, as prior experience with their own child's deviant behavior, may have set up expectations for child behavior which may affect their ability to track positive and negative behavior in their own, as well as other children.

There is some evidence that suggests that parents of problem children may selectively attend to and track different child behaviors than parents of normal children. Lorber, Reid and Simard (1979) found that mothers' ability to track deviant child behavior on videotape is a function of the status of her own child. They found that mothers of normal children tracked more prosocial behavior than mothers of socially aggressive children, while mothers of socially aggressive children tracked more deviant behavior. Therefore, parents of deviant children may have formed different expectations and hypotheses (schemas) in regard to the kind of behaviors to expect from a child. Perceiving more deviant and less prosocial behavior may lead parents of deviant children to react in a more directive, controlling and negative manner towards their children, than parents of normal children who perceive more prosocial and less deviant behavior. Stollak et al.'s (1982) study supported this hypothesis when they found that parents with negative interpersonal perceptual styles tended to act in a more authoritarian manner towards their child, reflecting dominance and interpersonal distance, and their child's behavior was much more constrained and distant from the parent. They suggest that long-term relations with a perceptually biased (versus perceptually accurate) person will affect childrens' psychological development since the processes of family interactions are influenced by parental

person perception mechanisms.

ATTRIBUTION OF CAUSALITY

These observed differences in parents' perception of, and reaction to a child's behavior may be related to their methods of attempting to explain the causality of the child's behavior. For example, differences in perception may result when parents attribute causality of the child's behavior to deficits within themselves as parents, or the child himself, or within situational circumstances free of volitional control. Differences may also arise if parents perceive the problem as short or longterm, stable or changing, situation-specific or cross-situational, and controllable or uncontrollable. Cognitive variables have been studied with respect to emotional and behavioral disorders in adults and children, such as depression (Beck, 1976), test and speech anxiety (Meichenbaum, 1972), anger control (Novaco, 1977ab), impulsivity (Palkes et al., 1968), also delinquent adolescents and their families (Mowry, 1975; Wells, 1976).

The problem of whether external or internal cues permit a person to identify and label an emotional state has been with us since James (1890) first suggested that, "the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur, is the emotion" (p.449). Several researchers since James found

that emotional states are characterized by similar physiological reactions with only subtle differences in visceral patterns between the various emotional states. This led researchers such as Schachter (1959) to suggest that cognitive factors may be major determinants of emotional states. Schachter and Singer (1962) suggested that one labels, interprets and identifies the emotional state in terms of the characteristics of the precipitating situations and one's cognitions in regard to the state of arousal. These cognitions are affected by past experience, and they determine whether the state of physiological arousal will be labelled as anger, joy, fear or another emotion.

Weiner and his colleagues have used an attributional approach to attempt to map specific relations between thought and affect, including the antecedents of positive and negative feeling states. Weiner, Russel and Lerman (1978) and Weiner (1980) indentified the dominant causal attributions for achievement performance. One dimension is locus of control or causality (whether the cause resides within, or is external to the actor). Internal attributions for success are described as ability, effort or personality and they produce the affects of pride, competence, confidence and satisfaction. External attributions are such things as luck and others' influences, and they augment feelings of gratitude and thankfulness. For failure,

however, internal attributions magnify guilt, whereas, external attributions give rise to anger and surprise.

Causal stability (perceived duration of a cause) is a second attributional dimension. Internal and stable attributions for failure are described as giving rise to depression, apathy and resignation. An internal-stable attribution could be lack of ability or a personality deficiency. Internal-unstable or external-stable or unstable attributions are described as giving rise to more transient frustration with only temporary loss of self-esteem. Conversely, internal-stable attributions for success result in more global increases in self-confidence and competence than internal-unstable or external attributions.

A third dimension described by Weiner and his colleagues, is controllability. Negative behavior of an actor, which is perceived by observers to be controllable, gives rise to negative reactions such as anger, whereas, when it is perceived to be uncontrollable, reactions such as pity and sympathy arise. Sympathy is positively correlated, and anger negatively correlated with helping judgements. Failure attributed to an internal-stable and uncontrollable factor within the subject (eg. lack of ability), gives rise to helplessness (Seligman, 1975) and performance decrements, whereas failure attributed to an internal, unstable and controllable factor (eg. lack of effort), is not associated

with helplessness, and results in performance maintenance or increments. Thus, achievement change programs involve changing students' attributions for failure from lack of ability to lack of effort.

Weiner, Graham and Chandler (1981) further refined this theory in their attributional analysis of pity, anger and guilt. They found that subjects felt pity, when the cause of a problem was identified as uncontrollable and stable, and either internal or external locus of control to the subject. They felt either anger or guilt, however, when the cause of a problem was perceived as internal and controllable to the subject. The cause was more likely to be perceived as stable, when subjects felt angry, than when guilt was felt, however, the cause was less likely to perceived as stable with anger and guilt, than with pity. Jones and Nisbett (1972) also hypothesized that actors tend to make situational (external) attributions for their behavior, while observers typically make dispositional (internal) attributions for the actor's behavior.

ATTRIBUTIONAL RESEARCH WITH CHILDREN AND PARENTS

To date, only a small portion of attributional research has been conducted out of the laboratory or focused on other than adult populations. However, if in fact the attributions a person formulates to explain a child's behavior affect the person's feelings, and thus, his

behavior towards that child, attributional research would seem to be very relevant to research on conduct disordered children.

Compas, et al. (1981,1982) found that parents of learning problem children tended to make internal attributions for their child's problems and successes (attributions expected of observers), whereas, their children tended to make external attributions for their problems (attributions expected of actors). They also showed a relative tendency to take greater responsibility for positive or successful experiences than for problems. Chapman and Boersma (1979), however, found that learning problem children tended to perceive their success as externally determined.

Affleck et al. (1985) found that in mothers of developmentally disabled infants, early self-blame for their child's difficulties was associated with more optimal parental perceptions, mood states, and interactions with their children and that blaming others was usually related to less optimal outcomes. Mothers who blamed themselves reported lower mood disturbance and expected caretaking difficulties during the initial interview, and fewer caretaking problems several months later when compared to mothers who blamed others. These results are consistent with previous research on attributional correlates of coping with victimization (Affleck et al., 1984; Bulman and

Wortman, 1977).

Affleck et al. (1985) describe research that distinguishes between two types of self-blame: characterological and behavioral self-blame. Characterological self-blame involves causal attributions to stable aspects of self such as unmodifiable personal deficiencies. Thus, similar events in future are viewed as unavoidable and depression and lowered self-esteem result. Behavioral self-blame occurs when undesirable outcomes are attributed to one's own modifiable behavior, so it is considered that future events can be avoided, and that one is able to effect positive outcomes in similar situations in the future. Such a belief could increase the likelihood of active, problem-focused coping behavior.

Amirkhan (1982) also found that attributions for success in hyperactive children were different depending on whether the child was on, or off medication prescribed for control of hyperactivity. Expectations for success in a medicated child were on par with a typical nonhyperactive child, while expectations for a nonmedicated hyperactive child were lower. Success on an exam for normal students was attributed to a combination of ability, effort (internal factors), and a good breakfast, whereas, success for medicated hyperactive children was attributed to the medication (external-stable factor). Success for unmedicated hyperactive children was attributed to effort, an unstable cause, and subjects were reluctant to predict

future successes.

External attributions has also been linked to mothers' abuse potential in the literature. Stringer and LaGreca (1985) found that maternal perceptions of external locus of control and child behavior problems were significantly related to abuse potential in male children. They hypothesize that mothers with abuse potential may have reported perceptions of control by powerful others if they were caught in difficult power struggles with their children, an interpretation that is consistent with the coercion hypothesis. This external orientation may be acquired by individuals in order to cope with feelings of helplessness, and buffer the effects of negative confrontations with their children.

There is, also, evidence that families of delinquent adolescents attribute the cause of their child's behavior to different factors than families of nondelinquent children. Mowry (1975) found that families of nondelinquent adolescents made more external explanations for the adolescent's behavior when it was socially undesirable, and used fewer external explanations when the behavior was socially desirable, than families of delinquent adolescents. The delinquent adolescents did not differ from nondelinquents when behaviors were socially desirable, but nondelinquents used significantly more external explanations when behaviors were socially undesirable. This research did

not, however, consider the emotional reactions to delinquent behavior, nor did it consider the other dimensions of attribution (stability, situational globalness or specificity, and controllability) which have been considered to be important by researchers studying motivation, depression and learned helplessness (Abramson, Seligman and Teasdale, 1978; Seligman, 1975). These factors could be applied to research in parent-child interactions in order to better understand the reasons for observed differences in perceptions of, and reactions to child behavior.

ATTRIBUTION OF CAUSALITY AND DEPRESSION

Seligman (1975), in his theory of learned helplessness, has suggested that a belief in one's ability to control the environment influences one's behavior-outcome expectancies. When individuals perceive that they have control over their environment, they expect their instrumental responses to produce desirable outcomes and they, therefore, emit more voluntary responses than individuals who have no expectation of control over their environment. Abramson, Seligman and Teasdale (1978) in their reformulation and critique of the learned helplessness model, have suggested that perceiving that outcomes are uncontrollable results in three deficits: motivational, cognitive and emotional. Motivational deficits result in retarded initiation of voluntary responses. Cognitive deficits result from learning that an

outcome is uncontrollable, since such learning makes it difficult to later learn that responses can produce that outcome. Finally, emotional deficits result in the form of a depressed affect, a factor which has consistently found to be more common in mothers of behavior problem than nonproblem children (Firestone and Witt, 1980).

Abramson, Seligman and Teasdale (1978) further discuss their theory as it relates to attributional style and the development of depression. They define two types of helplessness, universal and personal, which differ in terms of causal attributions held by subjects and the probability of depressive symptoms developing. Universal helplessness refers to the belief that performance outcome is independent of all the subject's responses, as well as the responses of all other people. This type of helplessness is, thus, more related to an external-stable attributional style since subjects believe an outcome is just as likely to occur with others, as with themselves. Outcome is related to task difficulty and luck, rather than the subject's ability or effort (Rizley, 1978).

In personal helplessness, however, the subject believes that, regardless of any voluntary response made, the performance outcome is not altered by themselves; however, it is believed that the outcome is contingent upon responses available to others. In personal helplessness, subjects have internal attributional styles, since they attribute

outcome to their own ability and effort, rather than task difficulty or luck. It is hypothesized that cognitive and motivational deficits occur in both types of helplessness, but lowered self-esteem occurs only in personal helplessness. Therefore, internal attributional styles may be related to the development of motivational and cognitive deficits, as well as depressed affect.

These concepts may be related to the development and/or maintenance of depressed affect in mothers of problem children, and their responses to parent training programs. Mothers who show a universal feeling of helplessness in regard to their child's behavior, may feel that their child's behavior problems are beyond theirs, as well as all others' control, and thus, may respond poorly to treatment, or terminate early because of motivational and cognitive deficits. They may still feel adequate as parents, and may be able to deal effectively with other children, but may have given up hope that anything or anyone could change their child's behavior. However, parents who show personal helplessness, may feel guilt, self-blame and depressed affect due to their belief that, although they may have no control over their child's behavior, others are capable of controlling it. This belief may result in perceptions of low self-worth and inadequacy as a parent, and tendencies to respond poorly to treatment or terminate early may be related to motivational, cognitive and emotional deficits.

According to Affleck et al.'s (1985) findings, however, mothers with internal attributions for their child's problems should be more responsive to training aimed at modifying their child's behavior than parents who blame others, or the child for the problem, but only if this is a behavioral type of self-blame rather than a characterological self-blame. The parents who experience depression, as well as who do poorly in parent training programs, probably experience characterological self-blame, according to Affleck et al.'s (1985) hypothesis.

Beach, Abramson and Levine (1980) have also studied attributional style, as it relates to the development of depression. They indicated that attributing lack of control to internal factors leads to lowered self-esteem, whereas, attributing lack of control to external factors does not. As well, attributing lack of control to stable factors would lead to an expectation of uncontrollability in future situations, so helplessness deficits would extend across time. Similarly, attributing lack of control to global, rather than situation-specific factors should lead to an expectation of uncontrollability across situations. Alternatively, even though a subject may attribute lack of control to internal factors, attributing lack of control to unstable and specific factors should lead to short-lived, situation-specific helplessness deficits. Therefore, parents who attribute negative child behavior to factors

internal to themselves as parents, as well as, uncontrollable, stable and global factors, may be more likely to develop general and chronic depressive symptoms, than parents who attribute negative child behavior to uncontrollable, yet, external, or unstable, or situation-specific factors. Parents who attribute negative child behavior to factors internal to the child, as well as, controllable, stable and global, according to this theory, may be more likely to feel anger, rather than guilt, as well as, a sense of helplessness. These parents may be at risk for child abuse. In fact, Larrance and Twentyman (1983) found that abusive parents expected more negative behavior from their children, attributed negative child behavior to internal and stable factors to the child, and positive child behavior to external and unstable factors, whether the behavior was emitted by their own, or another child.

Beach, Abramson and Levine (1980) discuss another aspect of attribution. This aspect involves subjects' biases towards subscribing to unrealistic beliefs and unattainable goals, and viewing these beliefs as important to follow in their daily lives. The two types of belief systems are described as "belief-based" and "evidence- based". Belief-based people have tendencies to make certain causal inferences, rather than others, by consistently relying on the same generalized beliefs about themselves, others and the world. These people tend to be insensitive to

environmental information, as were some of the parents of behavior problem children cited by Patterson, Cobb and Ray (1973). Evidence-based people are influenced by environmental information, and tend to make causal inferences by relying on the same or similar patterns of situational information to resolve causal ambiguity. Metalsky and Abramson (1980) suggest there may be different therapeutic implications depending on the type of belief system a subject employs. They suggest that cognitive restructuring therapies (Beck, 1976; Meichenbaum, 1977) would be most effective for those exhibiting strong belief-based styles, whereas, more direct behavioral interventions, such as assertiveness or social skills training may be more effective for those exhibiting strong evidence-based styles.

Bugental, Whalen and Henker (1977) and Bugental et al. (1978) have found some support for Metalsky and Abramson's hypothesis, using two types of behavioral-change approaches with hyperactive children. They used self-control training, which was an adaptation of Meichenbaum and Goodman's (1971) verbal mediation procedures, as well as an external reinforcement procedure involving the provision of social approval contingent upon effective task attention. The results showed that children with an external attributional style were significantly more responsive to the reinforcement intervention, than to self-control procedures,

whereas, children with an internal attributional style responded better to self-control training. Thus, when children held a belief system that involved feelings of control by others, then they responded to control by others; however, when they believed they were internally controlled, they responded to training that increased this sense of control.

The literature on attributional style and its interaction with affective disorders, behavior and treatment effectiveness, may also be applied to parent training. Typically, parents have been assigned to parent training programs based on characteristics of their child, rather than characteristics of the parent. Child characteristics are described as aggressive, antisocial, and delinquent (O'Dell, 1974; Reisenger, Ora and Frangia, 1976), conduct disordered (Eyberg and Johnson, 1974; Johnson and Christensen, 1975; Patterson, 1974a,b), and hyperactive (Bachman and Firestone, 1979; Brundage-Aguar, Forehand and Ciminero, 1977). Reported dropout rates from parent training programs are sometimes close to 50% (Firestone, Kelly and Fike, 1980; Johnson and Christensen, 1975; Patterson, 1974a), and many parents respond poorly to behavioral treatment (Patterson, 1974a). It has also been found that parents who terminate treatment prematurely, and/or respond poorly to treatment, differ from good responders and completers in several important ways: age,

educational and IQ level, socioeconomic status, and presence of psychopathology. This literature on attributional style suggests that behavioral parent training may only be suited to parents with certain characteristics, as well as a particular attributional style and belief system. Other types of parents, particularly those with less education, and who have more economic and psychological difficulties as well as different belief systems, may require a different approach to treatment. If they feel that their child's behavior is internally controlled by their child, and is stable over time and cross-situational, and not controllable by themselves as parents, they may not believe that behavior modification will work and may sabotage treatment, unconsciously or consciously. Affleck et al. (1985) found this pattern in parents of developmentally disabled infants. Parents who were able to accept the blame (or responsibility) for their child's disorder were more effective in managing their child and suffered less from low self-esteem and mood disturbance.

Meichenbaum and Camerson (1974) have suggested that researchers tend to underemphasize the importance of how subjects perceive and evaluate environmental circumstances, since these factors have been implicated in the development of psychological disorders. Cognitive therapies have often been called "reattribution therapies" since they attempt to modify cognitive distortions which have been hypothesized as underlying the disorders (Beck, 1976; Ellis and Grieger,

1977; Meichenbaum, 1977). Gordon and Davidson (1981) have also suggested that causal relationships may exist between private events such as self-statements and irrational beliefs, and overt parenting behaviors, which points to the need for more careful evaluation of, and attention to cognitive factors with parents, in their dealings with their child's misbehavior.

There is some evidence supporting this idea from preliminary work by Patterson and Littman, at the Oregon Social Learning Center. They have found that a mother's behavior towards her child may be substantially altered by changing her attributional set. They found that leading a mother to view her child's behavior as motivated by positive intent, makes her less likely to perceive it as an attack. She may, therefore, be less likely to respond with retaliative punishment, and the parent and child may be less likely to develop a coercive style of interacting. Patterson (1976) showed that when coercive behaviors were punished by parents, problem children were more likely to persist in performing their deviant behavior, than normal children, and the frequency of punishment acceleration was also correlated with the overall rates of deviant behavior, particularly when the contingency involved a counterattack by the child. If the mother no longer perceived her child's behavior as an attack, this coercive cycle may not develop as easily.

Also, since parents of problem children have more

emotional problems, especially depression, they may also tend to have more irrational beliefs related to guilt, failure and sources of unhappiness, especially in regard to the parenting role, than parents of nonproblem children. Since depressed individuals are less likely to initiate voluntary covert, as well as overt responses (Beach, Abramson and Levine, 1980) due to motivational and cognitive helplessness deficits, they may be less likely to respond well to dyadic, behavioral parent training and be more likely to terminate treatment prematurely. Attention to cognitive variables, especially attribution of causality for child behavior and misbehavior, may increase the effectiveness of parent training programs with more types of parents. For example, parents who have belief-based attributional styles, may attribute child misbehavior to factors internal to the child, that are uncontrollable by the parent, and likely to remain so in all situations across time. They may experience a fair degree of anger, as well as depression and guilt in regard to the parenting role and their child. They may be relatively insensitive to any environmental information, especially if it does not fit with their belief system, and may be unresponsive to parent training. They may require cognitive restructuring therapies, themselves, before they can adequately assess and deal with their child's behavior problems. Parents who use more evidence-based styles and who may attribute their

child's behavior to environmental circumstances, even though they may feel these circumstances are uncontrollable, stable and cross-situational, may not experience such a degree of anger, guilt and depression, and may be more sensitive to environmental information, and responsive to a dyadic behavioral training program. Also, parents who have had long-standing, multiple conduct problems with their children may be more likely to have developed belief-based styles due to repeated failure to change the child's behavior, than parents of children with less severe conduct problems. The former parents may require intensive, individually tailored training, involving communication and problem-solving, as well as training in behavioral acceleration and deceleration techniques, in order to terminate or prevent coercive styles of interaction. Parents with less severe problems may still believe that they can effect a change in their child's behavior and, thus, may be sensitive to environmental information and may only require learning of a few relatively simple behavioral techniques. It is probable that, by tailoring parent training programs to the attitudes, needs and characteristics of the parents, as well as the child, that treatment effectiveness will be enhanced, and generalization and maintenance of that behavior change increased.

INTRODUCTION

The proposed study will investigate hypothesized differences between mothers of behavior problem and nonproblem children in their causal attributions for child behavior, including locus of control, stability over time, specificity to the situation and perceived controllability by the parent. It will also investigate differences in their ability to perceive prosocial and antisocial child behavior on videotape, as well as their disciplinary styles and attitudes towards discipline. Their level of depression, especially as it relates to learned helplessness deficits, will also be investigated.

It is hypothesized that:

1. Mothers of behavior problem children are more likely to demonstrate higher levels of depression and more of a perceived loss of control of their child's behavior.
2. Mothers of problem children are less able to perceive prosocial child behavior, and more able to perceive antisocial child behaviors on videotape, than mothers of nonproblem children.
3. Mothers of problem children will be more likely to attribute antisocial behavior to factors internal to the child, which are stable over time and across situations, and are more likely to attribute

prosocial child behavior to factors external to the child, unstable over time and situation-specific, than mothers of nonproblem children. Mothers of nonproblem children are hypothesized to show the opposite pattern of attributional factors.

4. Mothers of problem children are more likely to chose power-oriented authoritarian methods and reasons for discipline, whereas, mothers of nonproblem children are more likely to chose rational, authoritative methods and reasons for discipline.

CHAPTER II

METHODOLOGY

SELECTION PROCEDURES

A total of 60 mothers of boys, only, aged 6-0 years to 11-11 years attending a regular class in an elementary school in Red Deer, Alberta, served as subjects. Selection criteria also included the requirements of a two-parent family, and a natural child of both parents free from neurological, physical, or learning handicaps. Mothers were considered to have behavior problem children if the total scale t-score on the Achenbach Child Behavior Checklist was above 70, and if the t-score for the externalizing scale was above 70 and higher than the internalizing scale. Mothers were considered to have nonproblem children if all three t-scores were less than 70.

SUBJECTS

The families were predominantly middle class, with parents working in minor businesses and minor professional or technical occupations (Hollingshead Four Factor Index of Social Status mean = 42.3, standard deviation = 13.8). Ninety-one percent of mothers were white, with English as their first language; 6% were white French-Canadian with

English as their second language; and, 3% were Oriental with English as their second language. The mean age of the mothers was 31.87 years, (range= 26 to 43 years) and mean years of education was 11.89 years (range= grade 8 to 3 years post-graduate university education).

A preliminary analysis consisted of examining the sociodemographic variables (socioeconomic status and number of children in the family) between the two groups, as well as, the differences in the scores of the Achenbach scales, to determine if, in fact, one group represented mothers of behavior problem children, and the other, nonproblem children, and that the two groups did not significantly differ on any of the sociodemographic factors described in the literature, as affecting parents' attitudes and disciplinary styles.

A t-test performed using the Statistical Package for Social Sciences (SPSS)(Nie et al., 1975), indicated that there was no significant difference between families of problem and nonproblem children in socioeconomic status (Hollingshead, 1975) or in the number of siblings of the target child, in the family (see table 1).

Table 1

Socioeconomic Status and Number of Siblings

		MEAN	S.D.	p
SES:	Problem-child mothers	42.27	15.689	.978(ns)
	Nonproblem-child mothers	42.37	11.964	
SIBS:	Problem-child mothers	1.63	1.400	.240(ns)
	Nonproblem-child mothers	1.27	.94	

An analysis of variance performed on the Achenbach total t-scores shows significant differences, at $p<.01$, between the responses of mothers in the two groups, on the internalizing, externalizing and total scales, with mothers of problem children higher than mothers of nonproblem children in all cases. All mothers of problem children showed t-scores above 70 on the externalizing and total scales, with the externalizing scale above the internalizing scale in the problem-child group. This indicates that one group consists of mothers of behavior problem children, and the other group, of nonproblem children, according to the Achenbach (see table 2).

Table 2

Achenbach Child Behavior Checklist

Total Scale Scores

	MEAN		S.D.	
	Prob.	N.Prob.	Prob.	N.Prob.
Internalizing Scale	63.06	54.93	6.82	8.68**
Externalizing Scale	76.47	44.17	3.42	7.89**
Total Scale	73.20	46.93	3.01	7.99**

**p<.01

PROCEDURE

All mothers of boys in grades I through VI, in four elementary schools in Red Deer were contacted via a letter requesting their participation in a study of "parental attitudes towards childrens' behavior and disciplinary techniques". A total of 220 mothers were sent letters, and 91 of those returned them. Mothers who returned forms indicating their wish to participate were interviewed and told that participation in the study would involve completing five questionnaires which were designed to obtain background on their child and family, assess the types of disciplinary measures they used with their child and the reasons for their choices, and assess their own present level of stress and depression. If they agreed to participate, written consent was obtained.

Teachers were requested to sign a consent form, as well as complete a classroom rating form to determine the target population of behavior problem boys in their classroom (appendix B). However, this information was not used, as there was no difficulty obtaining a large enough sample of parents of children who were considered to be behavior problems, by sending the parent forms to all boys in the classroom.

Mothers were requested to complete a brief history form (appendix A) which included information regarding the ages of family members, educational levels, the occupations of the parents, as well as a brief history describing any sensory, physical, emotional, learning or behavioral problems in their children. They were also requested to complete the Achenbach Child Behavior Checklist, the Parental Attitude Survey, the Discipline Questionnaire, and the Beck Depression Inventory. Based on the information in the history questionnaire, and mothers' responses to the Achenbach Behavior Checklist, 35 were considered mothers of problem-children and 56 mothers of nonproblem children. Five of the mothers of problem children were rejected because they did not fit the selection criteria: two were single parents due to divorce, one had a child with a hearing impairment, one had a child who had a learning disability and was in a special class part-time, and one scored above a t-score of 70 on the Internalizing scale of

the Achenbach, as well as the Total scale, although below a t-score of 70 on the Externalizing scale t-score of the Achenbach.

Of the 56 considered to be mothers of nonproblem children, 10 were rejected because they did not fit the selection criteria. Three were single parents due to divorce or separation, one had a child with cerebral palsy, one child was physically handicapped, three children were in a special class part-time for learning disabilities, one was a foster child who had been in the home less than a year, and two children showed t-scores on the Internalizing scale above 70. The first 30 mothers of the remaining 46 who fit the selection criteria were accepted. Once they had completed and returned the questionnaires, mothers who fit the selection criteria were requested to come into the school to view a 15 minute videotape of a parent-child interaction in a play situation.

MEASURES

ACHENBACH CHILD BEHAVIOR CHECKLIST

The Achenbach Child Behavior Checklist (Achenbach, 1978)(appendix F) was designed to record in a standardized format, the behavioral problems and competencies of children aged 4 through 16 years of age, as reported by their parents, or parent surrogates. It consists of two separate

forms: one measuring social competence (activities, social and school) and the other, behavior problems. Only the behavior problem form was used in this study. Parents were asked to respond to 113 questions describing types of child behavior, and rate their child's behavior, "as it is now, or has been in the last 12 months". They were required to circle a 2, if the behavior is "very true, or often true", a 1, if it is "somewhat, or sometimes true", and a 0, if it is "not true of their child". Responses to the checklist were scored on the behavior problem scales of the Child Behavior Profile by hand.

Achenbach (1978) derived the scales through factor analysis of checklists completed by parents of children referred for mental health services. Separate editions of the profile have been standardized for each sex at ages 4 to 5 years, 6 to 11 years, and 12 to 16 years. Each scales has been given a descriptive label: schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaints, social withdrawal, hyperactive, aggressive and delinquent.

Second-order factor analysis has shown that the behavior problems scales form two broad-band groupings, which have been labelled internalizing and externalizing. Studies have shown the Achenbach to show minimal racial differences, but significant socioeconomic status, sex and age differences, but referral status showed the greatest differences in total behavior problem scores. The test has been shown to

significantly discriminate between clinic and nonclinic status children (Achenbach, 1978, 1979; Achenbach and Edelbrock, 1979).

Mothers were considered to have behavior problem children if the total score on the Achenbach was above a t-score of 70, as well as if the t-score on the externalizing scale was above 70, and higher than the internalizing t-score. Mothers were considered to have nonproblem children, if the t-scores on the internalizing, externalizing and total scales were below 70.

PARENTAL ATTITUDE SURVEY (PAS)

Once the types of behaviors mothers perceived in the child were determined by use of the Achenbach Child Behavior Checklist, it was necessary to assess the types of maternal attitudes which may be related to the child behaviors. The PAS was designed by Matsalla and Franken (appendix C) to assess how parents attribute the cause of the prosocial and antisocial behaviors they perceived in their child. Twenty-eight multiple choice questions, 12 describing prosocial child behaviors and 16 describing antisocial behaviors, were constructed with four choices of answers. One was worded so that the cause of the child's behavior would be attributed to causes which were internal to the child and stable over time; one described the cause as internal but unstable over time; one described the cause as

external to the child (environmental or other-directed) and stable; one was external and unstable over time. Two of the factors considered important in attributional style by Weiner and his colleagues, internal-external and stability over time were, thus, being tapped in this questionnaire. The questionnaire was administered, initially, to a group of twenty graduate students and professors (all mothers) in the Psychology and Educational Psychology departments at the University of Calgary, as well as to 10 lay mothers, to determine whether the questions were measuring the attributional construct they were designed to measure. Preliminary results indicated that mothers who, verbally, indicated that they had trouble controlling their child's behavior, chose more items contributing the cause of their child's antisocial behavior to internal factors, whereas, mothers who were confident in their roles as parents, attributed antisocial behavior to external factors. The opposite was true, in each case, for prosocial behavior.

DISCIPLINE QUESTIONNAIRE (DQ)

The Discipline Questionnaire was also constructed by Matsalla and Franken (appendix D). It's purpose is to assess how a mother would discipline a child in a given situation, her reasons for choosing that type of disciplinary measure, as well as, how controllable she felt her child's behavior to be when that discipline was applied.

This controllability factor is the third attributional factor described by Weiner and his colleagues.

The questionnaire consists of thirteen items describing antisocial child behavior, with choices of disciplinary techniques including: ignoring, physical punishment, verbal reprimand, physical punishment plus restrict privileges, verbal reprimand plus restrict privileges, no punishment, approval and restrict privileges. Reasons for their choice of punishment were worded either to present an authoritarian attitude towards parenting, an authoritative attitude or a permissive attitude. These descriptions were similar to those described by Baumrind (1977). Authoritarian parents are more controlling and demanding and less warm, empathic and understanding of the child's needs for reasons for parent actions. They are less responsive to the child's communications, more concerned about the external behavior, and less flexible in their disciplinary approach, as the situation and reasons for the child behavior change. Their disciplinary approaches are more power-oriented, concerned with authority issues, rules and regulations. Authoritative parents are controlling and demanding parents who are warm, empathic and responsive to the child's communications. They emphasize the importance of providing explanations of why the child's behavior was inappropriate and are more flexible in their disciplinary approaches as the circumstances surrounding an incident

vary. Permissive parents are noncontrolling and nondemanding, but are relatively warm and responsive to the child's communications, but tend to feel that children learn discipline and respect for authority naturally as they grow up. They often do not see the need for disciplinary measures, and may often just talk to the child about the behavior. The number of times subjects chose each type of disciplinary technique, and each reason for discipline was summed for each group.

Mothers were then asked to rate their perceived controllability of their child's behavior, or how likely it was that their child would repeat a behavior after applying their chosen disciplinary techniques. Ratings on a scale from 1 to 5, from not at all likely, to highly probable, were chosen for each of the 13 questions.

BECK DEPRESSION INVENTORY (BDI)

The BDI (Beck, 1967) is a widely used self-report measure employed for the diagnosis of depression (appendix E). It consists of 21 questions that sample five categories of symptoms observed in depressed persons: emotional, cognitive, motivational, vegetative, and physical manifestations. It was constructed by selecting items that discriminate between depressed and nondepressed psychiatric patients, but it has been used with a wide variety of clinical populations (eg. Hammen, 1980; Seitz, 1970; Shaw et

al., 1979), as well as nonclinical populations, for a wide variety of research purposes (eg. Klein and Seligman, 1976; Miller and Seligman, 1975). It is reported to have a split-half reliability of .93 (Beck et al., 1961) based on a heterogeneous sample of 97 psychiatric patients.

Each question is a multiple-choice format with 4 to 6 choices, each with a score from 0 (absent) to 3 (severe or persistent presence of the symptom). A total score of 9 or more is considered clinically depressed: 9 to 13 is mildly depressed, 14 to 20 moderately depressed and 21 and above is severely depressed (Beck, 1972).

Factor analytic studies of the BDI have found from three to four orthogonal factors (Giambra, 1977; Golin and Hartz, 1979; Shaw et al., 1979; Weckowicz, et al., 1967). The first, and major factor, has been named Depression: Affective Malaise (Giambra, 1977), Guilty Depression (Weckowicz et al., 1967) or Hopelessness (Golin and Hartz, 1979) by researchers, but seems to include, in all cases, the following symptoms: depressed mood, sense of failure, lack of satisfaction, pessimism, guilt-feelings, work inhibition, social withdrawal, self-hate, self-accusation, sense of punishment, indecisiveness and self-punative wishes. The depressive mood, guilt, pessimism, self-accusation and self-hate have the highest loadings, while the other covariates seem to reflect an incapacitation brought on by the depressed mood. Factor two involves

suicidal-ambivalence, and factors three and four, appetite-weight loss and fatigability dimensions (Gambria, 1977).

Differences in the loadings of various items of the BDI were seen between severely and mildly depressed samples. Golin and Hartz (1979) found depressed mood and pessimistic outlook had the two highest loadings for the mildly depressed nonclinical group, whereas, the severely depressed psychiatric group showed the highest loadings on guilt-feelings, sense of being punished, feelings of failure, self-hate and self-accusation. The latter showed more somatic symptoms, as well. Weckowicz et al. (1967) suggested that this major factor may reflect exogenous depression for the nonclinical group, but endogenous depression for the psychiatric group.

VIDEOTAPE

Each mother was requested to view a 15 minute videotape sequence of an average 8 year old boy and his mother engaged in a free play interaction sequence in a home setting. Mothers were asked to watch a small portable television which played the 15 minute VHS videotape, and count (using two counters mounted in a metal box) the number of prosocial and antisocial behaviors they perceived being emitted by the child. Prosocial behaviors were described as positive behaviors such as smiling, helping and complying to parental

requests and questions, and as behaviors they would like to see more of in their child. Antisocial behaviors were described as disruptive, noncompliant, disrespectful behaviors, consisting of verbal or physical aggression or passive aggression, and as behaviors they would like to see less of in their child. Several concrete examples of prosocial and antisocial behavior were given to each mother before viewing the videotape (see Appendix G).

CHAPTER III

RESULTS

MATERNAL DEPRESSION AND CONTROLLABILITY OF CHILD BEHAVIOR

Scores on the BDI were obtained for each subject and the means of the two groups compared using a t-test. Each subject's rating (from 1 to 5) of how likely they felt their child's antisocial behavior would be to be repeated after discipline (ie. controllability measure) was obtained. The means of the two groups were compared using a t-test for both measures.

As hypothesized, mothers of problem children showed significantly higher levels of depression on the BDI, than mothers of nonproblem children ($t=7.06(58)$, $p<.001$), and perceived their child's behavior, on the Controllability of Child Behavior measure, as much less controllable after discipline ($t=11.05$ (58), $p<.001$), than mothers of nonproblem children (Table 3). Mothers of problem children were considered to be moderately depressed as a group, with a mean BDI score of 14.9 (range = 0 to 39), whereas, mothers of nonproblem children were considered to be nondepressed as a group (mean BDI score = 1.23; range = 0 to 11)(Beck, 1972).

Table 3

Beck Depression Inventory and

Controllability of Child Behavior

B.D.I.	MEAN	S.D.
Problem-child Mothers	14.93	10.37
Nonproblem-child Mothers	1.23	2.37
CONTROLLABILITY		
Problem-child Mothers	3.42	.72
Nonproblem-child Mothers	1.82	.34

Within the group of mothers of problem children, approximately 23% were severely depressed, 30% moderately depressed, 23% mildly depressed and 23% were not depressed, according to Beck's (1972) guidelines. Only one mother of a nonproblem child was considered to be depressed, and then, only mildly depressed (BDI = 11).

A frequency analysis of problem-child mothers' responses to the BDI questions, showed that the five most frequently chosen symptoms of depression (in descending order), related to self-accusation, irritability, fatigability, body image and sleep disturbance. The five least frequently chosen symptoms (in descending order) related to feelings of pessimism, self-punative wishes, depressed mood, weight loss and sense of punishment. The frequency with which each item

was chosen, plus the percent of mothers in each group choosing that item are presented in table 4.

Table 4

Beck Depression Inventory (BDI)

(Problem-Child Mothers)

FREQUENCY	%PROB.	%N.P.*	SYMPTOM
1	45.6	4.4	Self-accusation
2	37.8/37.8	4.4/6.7	Irritability/fatigability
3	35.6	10.0	Body image
4	31.1	2.2	Sleep disturbance
5	30.0	2.2	Work inhibition
6	25.6/25.6	3.3/1.1	Self-hate/indecisiveness
7	24.4	1.1	Social withdrawal
8	23.3	1.1	Sense of failure
9	22.2	0.0	Loss of libido
10	21.1	2.2	Lack of satisfaction
11	18.9	1.1	Crying spells
12	17.7	0.0	Guilty feelings
13	16.7	0.0	Loss of appetite
14	14.4	0.0	Somatic preoccupation
15	13.3/13.1	1.1/0	Pessimism/self-punative wishes
16	8.9/8.9	0/0	Depressed mood/weight loss
17	7.8	0.0	Sense of punishment

* =% of the total possible depression score for each group.

Pearson Product Moment coefficients were used to determine relationships between mothers' depression scores on the BDI and the other measures (Table 9). A strong positive relationship was found between problem-child mothers' depression scores on the BDI, and their reports of total behavior problems in their own child on the Achenbach Child Behavior Checklist ($r(29)=.431$, $p<.009$), especially the externalizing (acting-out) behaviors ($r(29)=.369$, $p<.022$). These externalizing behaviors included the aggression ($r(29)=.412$, $p<.012$) and delinquency ($r(29)=.323$, $p<.041$) scales, but not the hyperactivity ($r(29)=.135$, $p<.238$) or social withdrawal ($r(29)=.287$, $p<.062$) scales of the Achenbach. Thus, the more they reported their child's behavior to be externally out of control, with aggressiveness and delinquency, (which are behaviors which can be observed by significant others when they are occurring), the more likely they were to show depressive symptoms.

Mothers of nonproblem children did not show levels on the BDI which could be considered clinically depressed. However, a significant negative relationship was found in this group between mother's reports of depressive symptoms in their own child on the Achenbach and their depression scores on the BDI ($r(29)=-.292$, $p<.049$). Thus, the more symptoms of child depression (eg. harms self, feels guilty, suicidal talk, sadness), they report in their own child, the

fewer symptoms of depression they report in themselves.

The controllability measure (the likelihood of inappropriate child behavior repeating itself, despite maternal discipline) and maternal depression on the BDI were not significantly correlated (Table 10). Perceptions of controllability over their child's inappropriate behavior, were not significantly correlated with an increased likelihood of any type of behavior problem in their own child, as reported by the Achenbach, but was significantly correlated with mothers' perceptions of the causes of antisocial child behavior, and their ability to perceive, label and count child behaviors on videotape. The less control problem-child mothers perceived over their own child's behavior, the more likely they were to attribute antisocial child behavior to factors within the child that are stable over time (Parental Attitude Survey)($r(29)=.301$, $p<.050$), and the less likely they were to attribute antisocial child behavior to short-lived factors outside of the child's control ($r(29)=-.339$, $p<.033$).

High scores on the controllability measure, in mothers of problem children, which reflected a perceived lack of control over their child's behavior, were also related to poorer ability to perceive, label and count child behaviors observed on videotape ($r(29)=-.431$, $p<.009$). They also perceived, labelled and counted significantly fewer prosocial and more antisocial behaviors than mothers of

nonproblem children (Table 5).

PERCEPTIONS OF CHILD BEHAVIOR ON VIDEOTAPE

As predicted, mothers of problem children counted significantly fewer prosocial child behaviors than mothers of nonproblem children while observing the videotape, and they counted significantly more antisocial child behaviors than mothers of nonproblem children (Table 5). A Chi-square (phi coefficient) was calculated comparing the total number of prosocial and antisocial behaviors counted within each group. It indicates that the two groups of mothers showed significant differences in their ability to track and count prosocial and antisocial child behavior ($X = 49.74$; $p<.001$).

Table 5

Videotape Data

	Total N		MEAN		% of Total	
BEHAVIORS	Prob.	N.P.	Prob.	N.P.	Prob.	N.P.
Prosocial	693	1115	23.10	37.17	55	67.3
Antisocial	567	551	18.90	18.37	45	33.28
Total			42.00	55.20		

Pearson Product Moment coefficients were used to determine relationships between mother's ability to track child behavior on videotape and the other measures (see

Table 11). These correlations support an assumption that mothers are actively engaging in the formulation of attitudes towards child behavior. These attitudes are related to the types and severity of the behavior problems in their own child and may be affecting their ability to track child behavior on videotape.

In mothers of problem children, the more prosocial child behaviors they were able to perceive and count, the less likely they were to report aggressiveness in their own child on the Achenbach ($r(29)=-.369$, $p<.022$). This was seen in mothers of nonproblem children, but it was not a significant relationship. Also, in both groups of mothers, the more prosocial child behaviors on videotape they counted, the more likely they were to report symptoms of depression in their own child on the Achenbach, but, only in nonproblem child mothers was this a significant relationship ($r(29)=.377, p<.020$).

The total number of child behaviors counted from the videotape in mothers of problem children was significantly related to perceptions of greater control over their own child's behavior ($r(29)=-.431$, $p<.009$). Since the total number of behaviors tracked consisted of significantly more antisocial and significantly less prosocial child behaviors than mothers of nonproblem children, it can be assumed that perceptions of greater control over their child's antisocial child behavior, is positively related to mothers' ability to

track prosocial child behavior.

Correlations between videotape data and the Parental Attitude Survey, show that, in mothers of problem children, the more antisocial child behaviors they counted on videotape, the more likely they were to attribute prosocial child behavior to factors external to the child ($r(29)=.379$, $p<.020$). However, the more prosocial child behaviors they counted on videotape, the less likely they were to attribute the causes of this prosocial behavior to factors external to the child ($r(29)=-.511$, $p<.022$). Also, the more prosocial child behaviors they counted, the more likely they were to attribute the causes of antisocial child behavior to unstable (transitory) factors within the child ($r(29)=.349$, $p<.29$) or to stable factors external to the child ($r(29).538$, $p<.001$). They were also less likely to attribute antisocial behavior to stable factors within the child ($r(29)=-.290$, $p<.060$), although this relationship only approached significance. However, the more antisocial behaviors they counted on videotape, the less likely they were to attribute this antisocial behavior to unstable causes within the child, but this relationship was not significant.

CAUSAL ATTRIBUTIONS FOR CHILD BEHAVIOR

The number of times each subject chose internal-stable, internal-unstable, external-stable and external-unstable

causal attributions for child behavior were summed separately for prosocial and antisocial behavior situations. Mothers of problem and nonproblem children were compared on these eight dependent variables using a MANOVA to determine if significant differences in attribution of causality for prosocial and antisocial child behavior were evident between the two groups (Table 6). Mothers of nonproblem children attributed prosocial child behavior more to factors within the child, which are stable over time (eg. personality factors)(F=42.19 (1,58),p<.001), whereas, mothers of problem children attributed prosocial child behavior more to unstable (short-lived) causal factors, either within the child (F=8.28 (1,58),p<.001) or the environment (F=34.99 (1,58),p<.001). Mothers of nonproblem children attributed antisocial child behavior to more unstable factors when it was considered to be caused by the child (F=5.09 (1,58),p=.027), or factors within the environment ((Stable; F=16.76 (1,58),p<.001: unstable; F=42.10 (1,58),p<.001)). Mothers of problem children were significantly more likely to attribute antisocial child behavior to stable factors within the child (F=82.19 (1,58),p<.001).

Table 6

Parental Attitude Survey

	MEAN		S.D.	
	Prob.	Nonprob.	Prob.	Nonprob.
PROSOCIAL BEHAVIOR				
Internal-stable	1.70	6.4	1.74	2.98**
Internal-unstable	3.53	2.03	1.80	2.22**
External-stable	1.90	1.80	1.65	1.65
External-unstable	4.87	1.77	2.19	1.92**
ANTISOCIAL BEHAVIOR				
Internal-stable	9.03	1.70	3.78	2.31**
Internal-unstable	3.13	4.27	1.50	1.72*
External-stable	.67	2.43	1.30	1.98**
External-unstable	3.20	7.23	2.66	2.13**

*p<.05

**p<.01

Correlations between maternal causal attributions and other measures (as discussed partially in the previous sections) show several relationships between these causal attributions and child behavior problems, maternal depression on the BDI, perceived controllability of child behavior, as well as their ability to count prosocial and antisocial child behavior on videotape. Causal attributions

for child behavior were also related to mothers' disciplinary style and choices of disciplinary measures (Tables 15 and 16).

Mothers of problem children were more likely to give the child credit for prosocial child behavior (ie. attribute prosocial child behavior to internal factors), when they reported fewer behavior problems, overall, in their own child on the Achenbach ($r(29)=-.257$, $p<.085$; $r(29)=-.225$, $p<.116$) and less likely to give the child credit for prosocial behavior when they reported more overall behavior problems on the Achenbach ($r(29)=.296$, $p<.05$). However, only the latter relationship was statistically significant. Also, the more they blamed stable factors within the child for antisocial behavior, the more internalizing behavior problems they reported in their own child on the Achenbach ($r(29)=.470$, $p<.004$). However, the more they blamed factors external to the child for antisocial behavior the fewer overall behavior problems they reported in their own child on the Achenbach, but only the number of internalizing behavior reported was significantly lower (total score on the Achenbach; $r(29)=-.337$, $p<.034$: internalizing scale; $r(29)=-.433$, $p<.008$). Also, the more they attributed antisocial child behavior to stable factors within the child, the less control they perceived over their child's antisocial behavior on the controllability measure ($r(29)=.301$, $p<.050$). They perceived more control when they

attributed antisocial child behavior to unstable, short-lived factors external to the child ($r(29)=-.339$, $p<.033$).

One might conclude from the above data that since mothers are attributing lack of control of their child's high level of antisocial behavior to factors within the child, they are not accepting the responsibility as parents. Thus, according to attribution theory (Beach, Abramson and Levine, 1980) this external attributional style should not result in a lowered self-esteem for these mothers. However, the data also shows that higher levels of maternal depression are significantly related to their attributing antisocial child behavior to stable factors within the child ($r(29)=.456$, $p<.006$), as well as attributing prosocial child behavior to short-lived, unstable factors external to the child ($r(29)=.499$, $p<.002$).

Mothers of problem children also choose different disciplinary styles according to their causal attributions for child behavior. The more stable and unchanging they perceived the causes of their child's prosocial behavior to be, the more likely they were to choose an authoritative (rational approach, based on reasoning) style of discipline ($r(29)=.403$, $p<.014$) and the less likely they were to choose an authoritarian (power-oriented) style of discipline ($r(29)=-.439$, $p<.008$) on the Discipline Questionnaire. Conversely, the more short-lived and unstable they perceived

the cause of their child's prosocial behavior to be, the more authoritarian ($r(29)=.325$, $p<.040$) and fewer authoritative ($r(29)=-.373$, $p<.021$) reasons they chose for discipline. Also, the more they attributed their own child's prosocial behavior to short-lived, unstable factors external to the child, the fewer prosocial child behaviors they counted on videotape ($r(29)=-.511$, $p<.002$). The more they attributed antisocial behaviors to factors external to the child, the more prosocial child behaviors they counted on videotape ($r(29)=.538$, $p<.001$). This was also seen in mothers of nonproblem children (Table 16).

DISCIPLINARY MEASURES AND DISCIPLINARY STYLES

A MANOVA was used to compare mothers of problem and nonproblem children on their choices of 8 disciplinary measures on each of the 13 antisocial child behavior situations. Each subject's choice of disciplinary measure for each of the 13 questions was recorded. The two groups were compared on their responses to each of the questions. A second MANOVA was used to compare mothers reasons for choosing the type of disciplinary method (ie. permissive, authoritarian or authoritative reasons for discipline). Subjects were assigned a 1 if they chose a permissive reason, 2 for an authoritative reason, and 3 for an authoritarian reason for each of the 13 questions. The two groups were compared on each of the questions. Table 8

shows that mothers of problem and nonproblem children significantly differed in their choice of disciplinary measure on 4 of 13 questions (question 3,6,10 and 12). Appendix D shows that question 3,6, and 10 involve disobedience of school and home rules, whereas question 12 involves physical aggression towards a young child. On all the other 9 questions their choices were not significantly different.

However, their reasons for choosing the methods they did were significantly different on all of the 13 items. Mothers of problem children chose more authoritarian (power-oriented) reasons for discipline in all cases.

Intercorrelations of the measures show that for mothers of problem children, permissive reasons for discipline were chosen more often when they reported more schizoid behavior ($r(29)=.359$, $p<.025$) in their own child on the Achenbach (Table 19). They were also more likely to choose no punishment ($r(29)=.548$, $p<.001$) when they chose permissive reasons for discipline. Verbal reprimand plus restriction of privileges ($r(29)=.534$, $p<.001$) was chosen most often as a disciplinary measure, when permissive reasons for discipline were given by mothers. Mothers of nonproblem children also chose permissive reasons for discipline when they reported more internalizing behaviors ($r(29)=.313$, $p<.046$) especially depression ($r(29)=.423$, $p<.012$), but also when they reported more hyperactivity ($r(29)=.459$, $p<.005$)

in their own child on the Achenbach. In both groups of mothers, they were more likely to attribute prosocial and antisocial child behavior to factors external to the child when permissive reasons for discipline were chosen.

Mothers of problem children chose more authoritative (rational) reasons for discipline the more they attributed prosocial behavior to more stable, unchanging factors, but this relationship was significant only when they considered the causes of prosocial child behavior to be external to the child ($r(29)=.403$, $p<.014$). They were also less likely to blame stable factors within the child for antisocial behavior, and more likely to blame it on unstable internal factors, or external factors, when authoritative reasons for discipline were chosen, but none of these relationships were significant. In mothers of nonproblem children, however, choosing authoritative reasons for discipline was associated with significantly fewer overall behavior problems reported in their own child on the Achenbach ($r(29)=-.528$, $p<.001$), as well as fewer internalizing behaviors ($r(29)=-.514$, $p<.002$), such as schizoid ($r(29)=-.379$, $p<.019$), and depressive behaviors ($r(29)=-.390$, $p<.016$), and social withdrawal ($r(29)=-.334$, $p<.036$). They also chose verbal reprimand plus restriction of privileges ($r(29)=.441$, $p<.007$), most often as a disciplinary measure, and were more likely to attribute antisocial behavior to factors external to the child when authoritative reasons for discipline were

chosen. However, this latter relationship was nonsignificant.

For authoritarian (power-oriented) disciplinary styles, mothers of problem children seem to be using their causal attributions for child behavior much more than the child's actual behavior to decide upon a disciplinary measure; whereas, mothers of nonproblem children seem to be using both the child's behavior, as well as their own causal attributions. Authoritarian discipline in both mothers of problem and nonproblem children was chosen most often when mothers attributed the causes of prosocial and antisocial child behavior to factors within the child, (Table 19), rather than factors outside of the child. In mothers of nonproblem children, however, authoritarian discipline was also significantly related to reports of more internalizing behaviors in their own child on the Achenbach ($r(29)=.361$, $p<.025$), especially depression ($r(29)=.410$, $p<.012$). It was also related to fewer delinquent behaviors ($r(29)=-.413$, $p<.012$). Also, in mothers of problem children, the use of authoritarian discipline was associated with counting significantly more antisocial child behaviors on videotape ($r(29)=.292$, $p<.050$).

Thus, in all mothers the more they perceived the locus of control of child behavior to factors within the child, the more likely they were to choose an authoritarian disciplinary style. However, in mothers of nonproblem

children, their choice of authoritarian methods of discipline was related to the types of behaviors their own child displayed. In mothers of problem children, authoritarian discipline was related to mothers perceiving far more antisocial behaviors in the videotaped sequence of child behavior. Thus, mothers of problem children chose authoritarian discipline more often when they perceived a large amount of child behavior to be antisocial, and when they perceived the causes of child behavior to be factors within the child.

CHAPTER IV

DISCUSSION

The results of the preliminary analysis shows the two groups of mothers to be comparable in terms of socioeconomic status and number of siblings of the target child. Also, all were married, with their husbands residing within the home and all indicated that their child was free of serious physical, neurological, sensory, learning and emotional problems on the history questionnaire. Thus, significant differences between measures in this study do not appear to be related to differences in parent interaction styles due to socioeconomic status, or pressures related to single parenthood, number of children in the family or handicaps of the child.

An inspection was done of the data from the Achenbach Child Behavior Checklist completed by mothers of problem children. These mothers report problems with child depression, obsessive-compulsiveness, somatic complaints and social withdrawal on the internalizing scale of the Achenbach. They do not report significant difficulties with schizoid or uncommunicative behaviors. On the externalizing scale, mothers of problem children report significantly more

hyperactive, aggressive and delinquent behaviors than mothers of nonproblem children. Mothers of problem children described their children as having poor peer relationships, being disliked, feeling persecuted, and preferring to play with younger children. These behaviors are characteristic of children labelled as having an attention deficit disorder with hyperactivity (Minde, Weiss and Mendelson, 1972; Ross and Ross, 1976). These are also behaviors described by Patterson and his colleagues as being characteristic of children in families with coercive interaction patterns, and are usually the behaviors that parents seek to modify and/or eliminate when they participate in parent training programs (Patterson and Reid, 1970, 1973). Firestone and Witt (1980), however, found that a large proportion of these parents do not benefit highly from parent training programs, as a significant proportion of parents either terminate prematurely, or do not acquire effective skills to modify their child's behavior through dyadic parent training programs. They also found that these parents showed more pathology, especially maternal depression. They were also younger, had younger children and both parent and child were of lower IQ, than in families with parents who did well in dyadic parent training programs. They also found that the "drop-out" families had lower mean family incomes and fewer years of education. No significant differences were found between families with

behavior problem children and those with nonproblem children in the present study.

The present study seems to shed more light on possible reasons for the poor response of some parents to parent training. The results will be discussed in terms of the hypotheses of the study, as well as possible explanations for the significant relationships obtained. The results will also be discussed in terms of an extension of the present parent training model, to a model that addresses more variables underlying deviant parent-child interaction problems.

The first hypothesis was confirmed in the present study; that is, mothers of problem children described significantly more symptoms of depression and perceived their child as less controllable after discipline, than mothers of nonproblem children. Depression score on the BDI was not significantly related to lack of control over child behavior, however. The high frequency of self-accusative symptoms in the mothers of problem children, as well as, their attributions of causality for child behavior, suggest that they blame themselves for their child's problems and that their self-esteem as a parent is suffering. Their symptoms are also qualitatively different from both mildly and severely depressed populations, which may also be related to the possibility that it is significantly related to child aggressiveness and delinquency, rather than another life event. However, their perceptions and attributions of

causality for other life events were not measured in the present study.

Mothers of depressed children were significantly less depressed, which may relate to the observability of the child's behavior. Child aggressiveness and delinquency are highly observable behaviors to which friends, neighbors, family and school personnel usually react. Mothers are often told that they need to do something about their child's behavior. A depressed child is often a quiet, withdrawn child who bothers no one and appears to be quite well-behaved.

There are several possible explanations for the relationships seen between maternal depression and child behavior. First, it is possible that a genetic factor contributes both to an increased susceptibility to maternal depression, child aggressiveness and delinquency. Depression and aggression/delinquency have been related to poor anger control (Novaco, 1977a,b,1978). Researchers have also investigated physiological determinants of both endogenous depression and aggressiveness (eg. XYY syndrome).

The second possibility is that the child's aggressive and delinquent behavior is a result of being raised by a mother who is unable to cope with her own life stresses, and is, therefore, unable to cope with the added stresses due to child-raising. This may reduce her ability to be patient and evaluate her child's behavior reflectively, before

reacting to the behavior with disciplinary measures. Apathy and reduced motivation may also prevent her from using consistent discipline. Inconsistent discipline has been shown by Patterson and others to be counterproductive in teaching children the consequences of socially appropriate and inappropriate behavior. If maternal depression was present at, or before the child's birth, the child would have been raised with an apathetic mother and inconsistent discipline. Aggressive and destructive behavior is normally shown by young children at various developmental stages (eg. the "terrible twos") and if it is not dealt with in a firm, consistent and positive manner, it is likely to persist beyond the developmental stage. In this case, the child may not perceive his mother as being able to control his aggressiveness and destructiveness. If these behaviors become generalized to other adults and other situations, he will receive continual feedback that he is not behaving in a socially accepted manner, and may receive a lot of negative feedback from other adults and peers. He may doubt that he will be able to control himself in future, in order to fit in socially and be accepted by others. The child's self-esteem may begin to decline. The mother's self-esteem is also likely to decline further, as she begins to receive feedback from others (eg. teachers) that her child's antisocial behavior is a problem. This may lead to increasing feelings of helplessness to control her child,

and depression.

Symptoms of depression in the child, however, do not seem to result in feelings of depression or helplessness in mothers; rather, they are related to significantly lower feelings of depression in mothers. It is possible that a mother of a depressed child may feel competent if she perceives that being a good parent simply involves being able to control aggressive and delinquent behaviors. Aggressiveness and delinquency are behaviors parents most often seek help for in child guidance clinics (Patterson, 1974a), and, thus, must be considered as highly socially inappropriate in our society. These are also behaviors which are easily observed by significant others, who may not always keep their opinions as to the mother's child-rearing skills to themselves. Child depression is not as obvious to observers, and may not elicit as may questionning comments about the mother's parenting skills. It may, actually, elicit the opposite comments about how quiet and well-behaved the child appears to be. Thus, the mother may, actually feel more competent as a parent because her child is so quiet and nonaggressive.

The final possibility is that the mother's depression and sense of helplessness is the result of living with a child who has had a difficult temperament since birth (ie. irregular behavior, low in adaptability, initial withdrawal from the mother, intensity and predominantly negative mood).

As the child matures, the mother's lack of ability to nurture and control the child's inappropriate behavior, especially aggressiveness and delinquency, may result in low self-esteem in the mother, and a pervasive feeling of helplessness to control her child. Since being considered an effective parent is an important personal achievement in our society, depression is a likely result of considering oneself unsuccessful in this role. However, perception of one's success in the parenting role does not seem to be affected by raising a child who is more quiet, sullen and withdrawn than other children.

A discussion of the results of the third hypothesis may shed some light on the above results. Mothers of problem children were significantly more likely to attribute antisocial child behavior to factors internal to the child, which are stable over time and across situations. They are also more likely to attribute prosocial child behavior to factors external to the child, unstable over time and situation-specific, than mothers of nonproblem children. In both groups of mothers, the less control they perceived they had over their child's antisocial behavior, the more likely they were to formulate these causal attributions. This may be an attempt on the mothers' parts to protect their declining self-esteem.

Research on attributional theory suggests that as persons attribute the causes of aversive events to factors

external to themselves, self-esteem should not suffer, and feelings of depression and helplessness should be low (Abramsom, Seligman and Teasdale, 1978). These types of attributions have been termed "defensive" or "self-serving biased" attributions (Bradley, 1978). That is, by denying blame for bad outcomes or perceived failures, and taking credit for good outcomes or successes, a person may be able to protect his/her self-esteem from deterioration. Thus, when mothers in the present study attribute antisocial child behavior to factors within the child, they are, logically, not attributing the problem to themselves. Also, attributing prosocial child behavior to factors outside the child, suggests that one of the external factors may be themselves as parents. If this was the case, their self-esteem should not suffer. However, higher maternal depression in mothers of problem children is a significant variable in the present study, so it does not appear that their defensive attributional style is working. In both groups of mothers the more depressed they became, the more they used these explanations for the causes of child behavior, however, only in mothers of problem children were these causal attributions also significantly related to perceived loss of control over child behavior. Thus, it appears that the more mothers perceive their child's antisocial behavior to be out of their control, the more they attempt to use defensive attributions, but depression

(consisting of a significant amount of self-accusation) continues to be a problem in these mothers. In mothers of nonproblem children, the more depressed they feel the more they use defensive causal attributions, but they do not experience significantly high levels of depression, and do not perceive their child's antisocial behavior to be out of their control.

Both groups of mothers show the same relationships between child behavior, maternal depression and causal attributions. Thus, mothers of problem children are not reacting differently from other mothers. However, the less control mothers perceive over their child, the more significant the relationships become between these three factors. Thus, it seems unlikely that there is a genetic factor responsible for both maternal depression and antisocial child behavior. It also seems unlikely that mothers were significantly depressed before the child was born. If maternal depression caused the child's antisocial behavior, one would not expect to find the same relationships between child behavior, maternal depression and causal attributions in mothers of nonproblem children. Therefore, it seems likely that these mothers are reacting to a child whose behavior was more difficult to manage than other children from an early age.

One factor attributional theory fails to consider is the fact that, although it is possible for mothers to change

their perceptions about the source of the problem with their child's behavior, they cannot give up responsibility for their child in our society of nuclear families. They are still faced with the reality of having to deal with a problem child, until he is 18 years of age, as well as reactions from significant others to the child's behavior as he matures. Family, friends, teachers and other authority figures continue to give feedback to mothers that they should be able to control their child's antisocial behavior. Parents are forced to take responsibility for their child's aggressive and delinquent behavior as their juvenile matures and has contact with the law. Therefore, in our society, parents do not have an option to give up responsibility for the child. Authorities may step in and apprehend the child if the child becomes so out-of-control that the parents are deemed unfit or neglecting. The legal system may also place the child in an institution for control of delinquent behavior if he breaks the law. Parents are, then, often blamed for the problem and social stigma may result. Being a good parent is a valued attribute in our society, so it can be assumed that parents who do not believe they are good parents (and are repeatedly told by others that this is true) suffer a loss of self-esteem. Thus, conceivably, if one still has the need to control a perceived uncontrollable situation (ie. antisocial child behavior), but does not feel one has the skills to control it, (although other parents

seem to possess the skills to control their child) depression could result. The depression, therefore, is linked to the reality that they are faced with a longterm problem of control that they do not possess the skills to manage.

This would also be predicted from learned helplessness theory. Abramson, Seligman and Teasdale (1978) describe personal and universal helplessness. Personal helplessness is likely to result in cognitive, and performance decrements, as well as lowered self-esteem and depression. Persons believe (as may a parent of a problem child) that they do not have the skills to change an outcome, but that others have the skills. They attribute failure to themselves and depressions results. If, in fact, mothers believed that no one, including themselves, could alter their child's antisocial behavior (as would be the case in universal helplessness), because of some defect inherent in the child, they should not suffer a loss of self-esteem or experience significant depression.

The data in the present study, also indicates that mothers' perceived controllability over child behavior is significantly related to their ability to track prosocial and antisocial child behavior on videotape. The data supports hypothesis 2 since mothers of problem children were able to track significantly fewer prosocial behaviors and significantly more antisocial behaviors on videotape, than

mothers of nonproblem children.

Other researchers who have investigated human information processing have suggested that the information one perceives and processes, is influenced by the hypotheses or "schemas" that one forms. These schemas are based on past experience with the particular information or stimuli. Landau and Goldfried (1981) have demonstrated that a person's schemata determines the acceptable form new information must take in order to be perceived accurately, as well as where in the environment a person should search for this information. Thus, it affects the kind of information that is attended to, processed and reacted to, as well as how it is reacted to. Lorber, Littman and Reid (1979) tested this hypothesis with subjects observing child behavior on videotape. They demonstrated that the tracking ability of subjects shown videotaped sequences of deviant child behavior is affected by giving subjects either a segment of videotape of extremely deviant child behavior, or relatively neutral child behavior, immediately prior to tracking of a common segment of child behavior. Those shown the more deviant behavior first were able to track negative behavior much easier than positive behavior, and significantly better than subjects shown the neutral child behavior segments. It was concluded that the initial segments set up different expectations for subjects which affected their tracking ability.

In the present study, perceived controllability of child behavior is the only variable that is significantly related to mothers' ability to track child behavior on videotape. Thus, it also seems likely that it is more related to the development of their attitudes concerning child behavior. However, there seems to be a circular relationship between child behavior and parent attitudes.

It is suggested that as mothers perceive their child's aggresssive and delinquent behavior to be more out-of-control, they will attempt to offset their feelings of failure as a parent through the use of self-serving, defensive attributions for the causes of child behavior. These attributions are used to help save their declining self-esteem as parents, by attributing failure as a parent to outside factors (ie. the child). However, they seem to develop a negative set in regard to child behavior, which affects their perceptions of child behavior and, likely, their reactions to their own child's behavior. This negative set and resulting parental behavior is likely to adversely affect their child's behavior and result in strengthening of the parental attitudes.

This circular pattern is shown in the data of the present study. The more out-of-control the parents feel over their child's behavior, the less able they are to track prosocial child behavior, and the more able they are to track antisocial child behavior. Although parent-child

interactions were not observed in the present study, they would not likely react positively to prosocial behavior to reinforce it, if they do not track it well. However, they may react to, and reinforce negative child behavior if they track it better. Behavior theory would suggest that this would result in an increase in frequency and intensity of antisocial child behavior and a decrease in prosocial behavior. The parent would likely perceive less control over her child's behavior, if the frequency and intensity of antisocial behavior continued to increase, and her beliefs that her child's behavior was affected by factors external to herself would likely be reinforced. Thus, lack of perceived control over child behavior is related to the development of a negative set in regard to child behavior. This negative set is likely related to their reactions to child behavior, which is likely related to an increase in antisocial child behavior and lack of perceived control by the parent.

Mothers' self-esteem, however, does not seem to be spared by their use of defensive attributions, as their level of depressive symptoms is significantly higher than mothers of nonproblem children. Thus, lack of perceived control over aggressive and delinquent child behavior appears to be perceived by mothers as a significant failure, which is not offset by defensive attributions. It is likely that they do not include themselves as a causal factor when their child shows prosocial behavior, which are behaviors that are

judged in our society as being indicative of successful parenting. The highly self-accusative nature of mothers' depression in the present study, also suggests that they are not considering prosocial behavior in their child as an indication of success as a parent. It is also likely that they are attributing failure as a parent to themselves, even though they are attributing the causes of antisocial child behavior to be stable factors within the child (ie. the Parental Attitude Survey). Weiner, Russel and Lerman (1978) and Weiner (1980) suggested that, for increases in self-esteem to occur, persons must attribute success over time with an event, to factors within themselves. Thus, in order for mothers' self-esteem to improve over time success as a parent (ie. a child who demonstrates prosocial behavior) must be attributed to themselves. The fact that maternal depression was found to be significantly higher in mothers of problem children, suggests that defensive attributions are not effective in mothers of problem children, and depression is likely to persist as long as they perceive a lack of control over their child's behavior, and as long as they continue to take responsibility for control over their child's negative behavior, and do not take responsibility for prosocial child behavior.

Interview data collected in this study indicate that the relationships between child behavior, maternal attitudes, beliefs and depression began developing at an early stage in

the parent-child relationship. Although no actual objective measures were taken, many mothers in the present study, reported perceiving a loss of control over their child's behavior and feelings of lack of competence as a parent when their child was very young. Many reported that their child was difficult from birth due to being colicky and having sleeping and feeding difficulties, while most others reported behavioral difficulties by the time their child was 2 years of age. Most did not trust their own suspicions, at that time, that their child's behavior was not normal, as they constantly received feedback from friends, relatives and professionals that, either their child would grow out of his stage, or their disciplinary methods may be at fault (ie. they were too lenient). As the child matured, he did not grow out of his difficulties, and many mothers reported feeling increasingly incompetent as parents, angry at themselves and their child, and feeling guilty for wishing they could escape from the problems at home as they felt their husbands did. However, they also reported feeling a sense of responsibility to try and effect a change in their child before he reached the feared adolescent stage of development. They did not see escape from the family situation as a viable option, and were still trying to find more effective ways of controlling their child's antisocial behavior. In short, they continued to assume responsibility for control of their child's behavior.

Mothers of nonproblem children reported occassional periods of feeling inadequate as parents when their child showed aggression or noncompliance, but these periods were short-lived, they did not feel significantly depressed and felt that their methods of discipline were effective, for the most part. They also felt somewhat apprehensive about their child's approaching adolescence, but felt confident that they could also learn to deal effectively with any adolescent difficulties that may arise. They were not pessimistic about their child's future, as were mothers of problem children.

Thus, it appears that many children of mothers in the problem-child group, appeared different and more difficult than other children, including their siblings, in early infancy. As the child matured, mothers began to receive feedback from others that confirmed their suspicions that their child's behavior was not normal, and they likely began to develop beliefs and expectations in regard to their child's behavior. Their self-esteem as parents also declined as they perceived less control over their child as the child matured. It appears that in many cases in the present study, the child's difficult temperament was antecendent to maternal attitudes. Most of these mothers reported few major difficulties with their other children, except that they were worried that their other younger children seemed to be imitating their difficult child's

behavior as they got older.

Other researchers have found distinct differences in infant temperament which relate to the development of difficulties as the child matures. Carey (1972) and Thomas and Chess (1977) found infant temperaments to vary in activity level, intensity, mood, rhythmicity, approach/withdrawal, adaptability, distractibility, attention span and persistence. Cameron (1979) also found that children with difficult temperaments in the first year of life tended to show behavioral disturbances later in childhood. If the child is a boy, he will tend to show more conduct problem behaviors (noncompliance and aggression), whereas, a girl will tend to show more withdrawn, dependent behaviors. Fagot (1984) suggests that it is the behaviors attended to most within each sex, that are maintained. Bell (1968), and Bell and Harper (1977) discussed evidence suggesting that parent-child interactions are of a bidirectional nature, but the results in these studies also suggest that a bidirectional model may also apply to child behavioral disturbances.

Patterson and his colleagues also showed differences in the behavior of conduct problem children as compared to nonproblem children, as well as differences in parents' behavior. Patterson (1976) and Taplin and Reid (1977) found that conduct problem children showed higher frequencies and intensities of problem behavior, than nonproblem children,

and they were more likely to persist in performing their deviant behavior after punishment by parents. Nonproblem childrens' behavior was suppressed by the same intensity of punishment.

It was also found that parents of problem children were more likely to give vague or interrupted commands, that the child could not respond to, and were more likely to terminate or ignore a command given to the child following his noncompliance, thus, negatively reinforcing compliance. Taplin and Reid (1977) found that parents of problem children were significantly more likely to provide positive consequences for deviant behavior and punishment for prosocial behavior in their children than parents of nonproblem children. Johnson and Lobitz (1974) reported that an increase in parental commands and negative responses was associated with an increase in the level of deviance manifested in their children. The results of these studies also suggest a bidirectional nature to deviant parent-child interactions.

It was suggested earlier in this discussion that mothers of problem children do not relinquish control of their child's behavior, even though they perceive that they have little control over the child's behavior with their discipline. One solution to this problem would be to change their style of discipline. An obvious alternature would be an authoritarian model, since they are constantly

receiving feedback from others that they must "control" their child. Also, as the child matures, they see others attempting to control their child through punitive means (eg. detentions, corporal punishment, writing lines in school). This would, thus, be an obvious model for parents to adopt since the model is already highly ingrained in our society. By using these more powerful techniques to control their child and teach them respect for rules and authority (support for hypothesis 4), parents may be attempting to alleviate their feelings of helplessness to control their child's antisocial behavior, in order to alleviate their feelings of depression and low self-esteem as parents. They may, then, feel that they are doing what society expects them to do, and that if this still fails to control the child, it is not from lack of trying. The question that needs to be examined in greater detail is why they choose an authoritarian method, when research suggests that this method undermines the child's self-esteem, and does not accomplish what it is supposed to accomplish, which is respect for rules and authority.

Baumrind (1971) found that authoritarian methods of discipline were related to low self-esteem and confidence in children, as well as poor self-control and self-reliance. Stollak et al. (1982) found that parents with negative interpersonal perceptual styles (ie. parents who expected more negative behavior from their child) tended to act in a

more authoritarian manner towards their child, reflecting dominance and interpersonal distance. Their child's behavior was much more constrained and distant from the parent. They suggest that longterm relations with a negatively perceptually-biased parent will affect childrens' psychological development since the processes of family interactions are influenced by parental person perception mechanisms. Mowry (1975) and Wells (1976) found the same type of beliefs in regard to the causes of deviant child behavior in the parents of delinquent adolescents. This also suggests that authoritarian means of discipline do not accomplish the teaching of respect for rules and authority that the parents wish to accomplish. As the child's deviant behavior persists as the child matures, even with the use of these more powerful means of discipline, the more likely the parent will perceive little control over the child's behavior. Also, their beliefs in regard to the causes of child behavior will be strengthened. Their perceptions of child behavior will also likely become more negatively biased, which will further prevent them from responding in a more positive manner to prosocial child behavior and reduce the likelihood of prosocial behavior from the child. As the child becomes an aggressive, delinquent adolescent, he is responded to by society in an authoritarian manner in detention centers and correctional institutions. Thus, parents have a societal model to use when they perceive

their child to be out of control. Authoritarian means of discipline are sanctioned by society, and, thus, may make the parent feel that they are using the most appropriate means of control over their child. However, these authoritarian measures of discipline erode the child's self-esteem, as well as the parent's self-esteem and perpetuate the destruction of the parent-child relationship. Thus, even though these measures are society-sanctioned, they are not the measures that parents should be using.

Baumrind (1971) found that parents who used authoritative means of discipline, which emphasized positive reinforcement and were based on teaching children the reasons for behaving appropriately, had children who were the most self-reliant, and had the highest self-esteem and self-control. It is likely that parents of these children also had high self-esteem and confidence in themselves as parents. It is also likely that they had positive expectations for their child's behavior and believed that their children were capable of being self-reliant and in control. These would be the parental attitudes that one would expect in a good parent-child relationship. They should be a goal of any treatment designed to improve parent-child interaction.

There is some evidence from research that suggests that if a child's behavior is changed, the parent can change their overt behavior towards the child. This suggests that

parents have also changed their label for their child. In Barkley and Cunningham's (1979), Campbell's (1973,1975) and Cunningham and Barkley's (1978) studies, mothers of impulsive boys provided more structure and suggestions about impulse-control and intervened more in a problem-solving situation, than mothers of normal boys. They also gave more encouragement, as well as criticism. However, when the impulsive boys were treated with methylphenidate (Ritalin) to reduce impulsivity and improve attention span, mother-child interactions changed. The mothers reduced their controlling, directive interaction style, increased attention to child compliance, and were more responsive to interactions initiated by the child. Conclusions from these studies were that mothers of impulsive boys seem to possess a repertoire of effective child management skills, but tend to respond to the child's style of interaction and problem-solving. Thus, when the parent believes their child is impulsive and in need of control they respond accordingly. However, when they are able to perceive the behavioral changes in their child, their own behavior changes accordingly. Thus, if they do not provide structure and control, they must no longer label their child as being in need of it.

Some evidence in Patterson, Cobb and Ray's (1973) work that suggests that if changing the child's behavior does not change the parent's beliefs and expectations in regard to

child behavior, (and, thus the label), the child's behavior change is not maintained. They describe a situation in which even though a child's behavior was modified, the parent maintained a deviant label for the child, which eventually led to deterioration in the child's behavior.

A possible explanation can be provided using the results of the present study. As was seen in the data, lack of perceived controllability of child aggressive and delinquent behavior and low parental self-esteem was related to the development of beliefs in regard to the causes of antisocial and prosocial child behavior which differed from those of nonproblem-child mothers. However, it was also related to the parents' ability to perceive and count child behaviors on videotape. The more the parent perceived a lack of control over antisocial child behavior, the more they attributed it to stable factors within the child, and less able they were to track prosocial child behavior.

In the studies of impulsive boys and their mothers, mothers' style of interacting with their children changed when their child's behavior changed. It may be that lack of perceived control and related negative perceptual bias were not a part of the mothers' attitudes towards their children, or these studies did not last long enough to observe mothers' styles of interacting revert to pre-study levels. However, in the case described by Patterson, Cobb and Ray (1973), although the child's behavior changed, the parent's

beliefs and expectations, and, likely, the parent's negative perceptual bias, did not change. Thus, the parent was still not able to perceive prosocial behavior in the child, even though the child's antisocial behavior was significantly reduced. It was, likely, mainly antisocial behavior that the parent tracked and responded to. Thus, prosocial child behavior was ignored, reduced in frequency, and antisocial behavior was reinforced and increased in frequency.

These studies suggest that in some cases, treatment of the child's behavior, alone, may produce sufficient change in the parent's behavior to break the destructive cycle of parent attitudes, and related parent-child interactions. However, in many cases, changing the child's behavior, alone, will not be sufficient to change the parent's attitudes, beliefs and expectations about that child, and the child's behavior change will be short-lived. Difficulties in generalization and maintenance of treatment change have been consistently found in research on dyadic parent training programs. Thus, it is proposed that an extended treatment plan be considered in situations in which deviant child behavior (especially aggression and delinquency) has been a problem, there is evidence that the parent's self-esteem is poor, and they perceive a loss of control over their child's behavior. The research pertaining to parent training will be discussed, as well as a proposal for an extended bidirectional treatment model.

Difficulties have been found in the generalization and maintenance of behavior change from parent training programs, as well as in the high frequency of premature termination of the program. Subject attrition is often as high as 50% (Firestone and Witt, 1980). Reasons given for poor generalization and maintenance of behavior change, as well as the high drop-out rate were related mainly to parental characteristics. Several researchers found more maternal depression in poor responders and drop-outs (Firestone and Witt, 1980; Griest, Wells and Forehand, 1979). Parents were also found to be of lower IQ, age, educational and socioeconomic level, and their children were younger and of lower IQ than those who completed treatment programs.

Few researchers, however, have closely looked at child variables as being significant factors in the poor treatment outcome of parent training programs. Kent (1976) examined Patterson's (1974) follow-up data and reported that those not participating in follow-up manifested 2.39 times more deviant behavior in baseline, than those participating in follow-up. Forehand et al. (1981) also found that mothers who participated in follow-up perceived their children as better adjusted on an adjective checklist at post-treatment, than mothers who refused to participate in follow-up. If, in fact, children of parents who do not benefit from contingency management parent training are more deviant, and

the parents perceive them as more poorly adjusted, than parents who do well in parent training groups, there may be more factors causing the deviant parent-child interactions than noncontingent responding of the parent to child behavior.

Bell's bidirectional model would suggest that child factors, such as the difficulties in infant temperament discussed previously, may also be influencing the parent-child interactions, as well as the parents' attitude toward the child and expectations for child behavior, and the parents' own self-esteem. A mother may expect that the contingency management methods she was told to use in a parent training program would modify her child's behavior, and make her child's behavior more like normal children. However, if her child has had a difficult temperament from birth, and did not respond normally to parent interaction initiations and controls, contingency management techniques may appear to be ineffective, and the parent may drop-out early from the program in frustration. If a parent failed to produce change in a child, after being told by professionals that if she used proper contingency management techniques she could change her child's behavior, she would likely blame both herself and uncontrollable child factors for her child's behavior problems, and would likely feel more helpless to control her child's behavior. This may lead to the use of even more authoritarian means of

discipline in an attempt to gain control over the child. This may also place the child at a higher risk for abuse. Studies of abused children show the same types of maternal causal attributions, and authoritarian, repressive family interactions as present in the mothers in the present study. Stringer and LaGreca (1985) suggest that mothers may acquire these perceptions and develop their disciplinary styles either as a response to negative confrontations with their child, or as a buffer against their effects.

Since it seems that there are child behaviors, parent attitudes and perceptions involved in the continuation of parent-child interaction problems, a more complete model of parent training should be considered. This should include the treatment of child factors, as well as parent factors, that could be related to problem interactions, as well as the interactions patterns themselves. Treatment of the faulty interaction patterns, by modifying only the parents' behavior (such as in behavioral parent training programs) has been shown to be less than effective in many cases. Researchers have shown that parental attitudes can interfere with change in parent-child interaction patterns, but parental attitudes have not been addressed specifically in contingency management programs. Maternal depression has also been considered to be a factor present in families who do not respond well to contingency management programs, but this has also not been specifically addressed in parent

training programs. However, studies of parent training programs have shown that broad-based models, that teach conflict-resolution skills, as well as contingency management techniques, or use family systems approaches, are more effective in producing and maintaining behavior change across many situations (Kelly, 1978; Sadler and Seyden, 1976; Sadler et al., 1976).

Treatment of child factors may include medical procedures such as medication or dietary management, where appropriate, as changing the child's behavior through these external means, has been shown to produce changes in parental interaction styles in some children. Medication has also been shown to be effective in reducing distractibility and impulsivity in about 75% of cases of hyperactive children (Barkley, 1977). Hyperactive children are described as being distractible, impulsive, with poor frustration tolerance, short attention span, poor self-control and inability to sit still. Although poor attention and impulse-control are the primary symptoms of this syndrome, school failure, behavioral, social and emotional problems frequently develop as the child matures, which frequently result in referral to a child guidance clinic in the early school years. Methylphenidate (Rilalin) has been shown to effectively modify the child's attention span and impulse-control, which is related to improvements seen in some aspects of behavior and social functioning at

home and at school (Barkley, 1977).

Dietary management has also been shown to be effective with some hyperactive children. Feingold (1975), a Pediatric Allergist, developed an elimination diet free of artificial flavors, colors and other additives, as well as natural salicylates. He found this diet to be effective in improving attention span and impulse-control, and reducing hyperactivity in children.

However, in many cases the child's behavior problems go beyond a poor attention span and poor impulse-control. Improved attention span and impulse-control are assets for teaching children new behaviors, but in cases where the child's aggressive, delinquent behavior and the parent's negative label and corresponding negative expectations are highly correlated with a perceived loss of control of child behavior and low parental self-esteem, medication and/or dietary management procedures are likely to be ineffective in changing parent-child interactions. Several studies of the effects of medication on hyperactive children have found this to be true. The medication is not effective in modifying significant behavioral disturbances (Barkley, 1977). Thus, it is important to look beyond the child, himself, to alleviate the factors which are operating to maintain the deviant parent-child interactions. An obvious direction of treatment is the other partner in the relationship, the parent.

Parental expectations for child behavior have been

described as being a significant variable in the development and maintenance of parent-child interaction difficulties, as well as an interference in the treatment of these difficulties. As discussed previously, parent attitudes towards the child do not necessarily change even if their child's behavior improves, if the parents' negative perceptual bias does not change. This can lead to eventual deterioration in the child's behavior. This may be a reason why behavior change is often not maintained at follow-up in many parent training programs.

All variables in the present study seemed to be related to the types of causal attributions that parents have developed to explain child behavior. Thus, it may be assumed that causal attributions may also affect, as well as be affected by, child behavior, maternal depression, perceptions of parental control over child behavior, as well as parental disciplinary styles. Causal attributions may also be a significant parental attitude variable that is related to the observations in the previously mentioned studies, of lack of effectiveness of parent training programs.

Attributional literature suggests that when one attributes failure to internal and stable factors, feelings of depression, apathy and resignation result (Weiner, Russel, and Lerman, 1978; Weiner, 1980). However, attributing success to stable factors within oneself results

in increases in self-confidence and sense of competence. Thus, in order for mothers of problem children to show increases in self-esteem and feelings of competence, and decreases in depressive feelings, they would need to begin to attribute success with their child to factors within themselves as parents. This could be one danger of the use of medication or dietary management without further intervention. Success in managing child behavior that is attributed to an external agent, (eg. medication) is not likely to change the mother's attitude towards the causes of her child's behavior, or her opinion about the effectiveness of her own child management skills. This would not likely lead to improvements in mothers' self-esteem or sense of competence as a parent, or a change in her label and beliefs about her child and the source of his behavior problems.

Affleck et al., (1985) found that mothers of developmentally disabled children were more effective in caretaking activities and reported lower mood disturbances when they accepted responsibility for the child's difficulties, as well as the child's development and future. As discussed earlier, it appears that mothers of problem children accept responsibility for the child's problem, as they continue to try and change it through more powerful disciplinary measures, however, they also need to feel responsible for their child's successes, if they are to improve their self-esteem and feel less helpless to control

their child, as well as change their attitudes in regard to the source of the problem. This may result in much more openness to accepting new child management strategies taught in contingency management parent training programs. Cognitive therapies may be beneficial to effect this needed change in parental attitude.

Cognitive therapies have often been called "reattribution therapies", since they attempt to modify cognitive distortions which have been hypothesized as underlying many disorders, such as depression (Beck, 1976; Ellis and Grieger, 1977; Meichenbaum, 1977). Gordon and Davidson (1981) have also suggested that causal relationships may exist between self-statements and irrational beliefs, and overt parenting behaviors. In fact, there is some supporting evidence from preliminary work by Patterson and Littman, that a mother's behavior towards her child may be substantially altered by changing her attributional set. They found that leading a mother to view her child's behavior as motivated by positive intent, makes her less likely to perceive it as an attack. She may, therefore, be less likely to respond with retaliative behavior, and there is less of a chance that a coercive interaction pattern will develop. Thus, cognitive therapies would seem to be an important, beneficial addition to any parent training program.

Thus, the proposed model addresses child factors which

may be modified by the use of medical procedures (ie. medication, diet), as well as the parents' beliefs and attitudes towards the child (ie. cognitive therapies). However, the treatment model also needs to include re-education for the parent. A parent who has responded to a child for 9 or 10 years in an authoritarian manner due to perceptions of loss of control and poor ability to perceive prosocial behavior, may need to be taught when and how to respond to that child's prosocial behavior, through contingency management techniques. These techniques would be best presented to the parent in conjunction with medical procedures with the child and cognitive therapy with the parent. This is important because the evidence shows that parents will not effectively learn or continue to use these techniques if they maintain a negative label for their child. However, it is expected that they will be able to learn and apply contingency management techniques to effectively change the parent-child interactions, if they believe that both they and their child possess the skills to change. Increases in the frequency of consistent and positive interactions with the child is also likely to increase the likelihood of prosocial behavior being produced by the child, and is likely to provide further evidence to the parent that their negative label for their child and themselves as parents is faulty.

In conclusion, the present study has shown that causal

attributions are affected by child behavior, and are significantly related to maternal depression, perceptions of the effectiveness of disciplinary measures in controlling antisocial child behavior, as well as the parents' choice of disciplinary measures. The same relationships were seen in mothers of problem and nonproblem children, except that mothers of problem children chose many more authoritarian measures of discipline, and that they perceived less control over their child's antisocial (aggressive and delinquent) behavior, and their ability to track prosocial and antisocial child behavior on videotape was affected. Thus, it is possible that the mothers of nonproblem children in the present study could develop the same patterns, if their child's aggressive and delinquent behavior became more frequent and intense. These relationships seen in both groups of mothers suggest that parent-child interactions are complex and involve both parent and child factors; therefore, any model proposed to treat parent-child interaction problems should consider all these variables. This should include treatment for child problems (eg. poor attention and impulse-control), parent difficulties (faulty belief systems which result in negative expectations for child behavior, and parental pathology), as well as treatment of the coercive interaction patterns by contingency management techniques. Unless all factors related to a problem interaction are considered during

treatment, behavioral change may not be forthcoming or may not be maintained. Broad-based models of parent training, such as these, may be more able to prevent future behavioral and emotional difficulties in adolescence, by reducing the individual and family stress associated with having a child with behavior problems, than more traditional parent training programs have been. They would require more of a time investment of more professionals to treat the child, the parent and the interaction problems, but the investment may reduce costs of professional and institutions that become involved with a delinquent adolescent and his family.

REFERENCES

REFERENCES

Abramowitz, C.V., Abramowitz, S.T., Weitz, L.J.,and Tittler, B: Sex-related effects on clinicians' attributions of parental responsibility for child psychopathology. Journal of Abnormal Child Psychology, 1976, 4(2), 129-138.

Abramson, L.Y., Seligman, M.E.P., and Teasdale, J.D: Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 1978, 87(1), 49-74.

Achenbach, T.M: The child behavior profile: I. Boys aged 6-11. Journal of Consulting and Clinical Psychology, 1978, 478-488.

Achenbach, T.M. and Edelbrock, C.S: Behavioral problems and competencies reported by parents of normal and disturbed children aged 4 through 16. Society for Research in Child Development Monographs, in press.

Affleck, G., McGrade, B.J., Allen, D.A. and McQueeney, M: Mother's beliefs about behavioral causes for their developmentally disabled infants' condition: What do they signify. Journal of Pediatric Psychology, 1985, 10(3), 293-304.

Affleck, G., Tennen,H., Allen, D., McGrade, B., and Ratzan, S: Causal attributions and coping with insulin-dependent diabetes. Journal of Basic and

Applied Social Psychology, 1984, 5, 131-142.

Ainsworth, M.D.S., Bell, S.M. and Stayton, D.F: Infant-mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. In M.P.M. Richards (Ed.), Integration of a child into a social world. London: Cambridge University Press, 1974.

Ainsworth, M.D.S., Blehar, M.C., Water, E., and Wall, S: Patterns of attachment: A psychological study of the strange situation. New Jersey: Lawrence Erlbaum Associates, 1978.

Ainsworth, M.D.S. and Wittig, B.A: Attachment and exploratory behavior of one year olds in a strange situation. In B.M. Foss (Ed.), Determinants of infant behavior, IV. London: Methuen, 1969.

Amirkhan, J: Expectations and attributions for hyperactive and medicated hyperactive students. Journal of Abnormal Child Psychology, 1982, 10(2), 265-276.

Bachman, J.E. and Firestone, P: A review of psychopharmacological and behavioral approaches to the treatment of hyperactive children. American Journal of Orthopsychiatry, 1979, 49(3), 500-504.

Barkley, R.A., and Cunningham, C.E: The effects of methylphenidate on the mother-child interactions of hyperactive children. Archives of General Psychiatry, 1979, 36, 201-208.

Baumrind, D: Current patterns of parental authority. Developmental Psychology Monographs, 1971, 4, (1&2).

Baumrind, D. and Black, A.E: Socialization practices associated with dimensions of competence in preschool boys and girls. Child Development, 1967, 38, 291-327.

Bayley, N. Schaefer, E: Relationships between socioeconomic variables and the behavior of mothers towards young children. Journal of Genetic Psychology, 1960, 96, 61-67.

Beach, S.R.H., Abramson, L.Y. and Levine, F.M. The attributional reformulation of learned helplessness and depression: Therapeutic implications. Unpublished manuscript, University of New York at Stony Brook, 1980.

Beck, A.T: Depression: Clinical, experimental and theoretical aspects. New York: Harper and Row, 1967.

Beck, A.T: Role of fantasies in psychotherapy and psychopathology. Journal of Nervous and Mental Disease, 1970, 150, 3-17.

Beck, A.T: Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press, 1972.

Beck, A.T: Cognitive therapy and emotional disorders. New York: International Universities Press, 1976.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J., and Erbaugh, J: An inventory for measuring depression. Archives of General Psychiatry, 1961, 4, 561-571.

Bell, R.Q: A reinterpretation of the direction of effects in studies of socialization. Psychological Review, 1968, 75(2), 81-95.

Bell, R.Q. and Harper, L.V: Child effects on adults. New Jersey: Lawrence Erlbaum, 1977.

Bell, S.M. and Ainworth, M.D.S: Infant crying and maternal responsiveness. Child Development, 1972, 43, 1171-1190.

Berkowitz, L: Aversively stimulated aggression: Some parallels and differences in research with animals and humans. American Psychologist, 1983, 38, 1135-1144.

Bernal, M.E., Duryee, J.S., Pruett, H.L. and Burns, B.J: Behavior modification and the brat syndrome. Journal of Consulting and Clinical Psychology, 1968, 32, 447-455.

Biller, H.B: Father, child and sex-role. Lexinton: Heath Lexington Books, 1971.

Biller, H.B: The father and personality development: Paternal deprivation and sex-role development. In M.E. Lamb (Ed.), The role of the father in child development. New York: Wiley, 1976.

Blanchard, R.W. and Biller, H.B: Father availability and academic performance among third-grade boys. Developmental Psychology, 1971, 4, 301-305.

Bowlby, J: Attachment and loss. Vol. I, attachment. London: Hogarth, 1969.

Bowlby, J: Attachment and loss. Vol. 2, separation. London: Hogarth, 1973.

Bradley, G.W: Self-serving bias in the attribution process: A reexamination of the fact or fiction question. Journal of Personality and Social Psychology, 1978, 36, 56-71.

Brundage-Aguar, D., Forehand, R. and Ciminero, A.R: A review of treatment approaches for hyperactive behavior. Journal of Clinical Child Psychology, 1977, Spring, 3-10.

Bugental, D.B., Collins, S., Collins, L., and Chaney, L.A: Attributional and behavioral changes following two behavioral management interventions with hyperactive boys: A follow-up study. Child Development, 1978, 49, 247-250.

Bugental, D.B., Whalen, C.K. and Henker, B: Causal attributions of hyperactive children and motivational assumptions of two behavior-change approaches: Evidence from an interaction position. Child Development, 1977, 48, 874-884.

Bulman, R. and Wortman, C: Attributions of blame and coping in the "real world": severe accident victims react to their lot. Journal of Personality and Social Psychology, 1977, 35, 351-363.

Cameron, J.R: Parental temperament, children's temperament, and the risk of childhood behavior problems: initial

temperament, parental attitudes, and the incidence and form of behavioral problems. In S. Chess and A. Thomas (Eds.), Annual progress in child psychiatry and child development. New York: Brunner/Mazel, 1979.

Campbell, S.B: Mother-child interaction in reflective, impulsive and hyperactive children. Developmental Psychology, 1973, 8(3), 341-349.

Campbell, S.B: Mother-child interaction: A comparison of hyperactive, learning disabled and normal boys. American Journal of Orthopsychiatry, 1975, 45(1), 51-57.

Carey, W.B: Clinical applications of infant temperament measures. Journal of Pediatrics, 1972, 81(4), 823-828.

Carey, W.B. and McDevitt, S.C: Stability and change in individual temperament diagnosis from infancy to early childhood. In S. Chess and A. Thomas (Eds.), Annual progress in child psychiatry and child development. New York: Brunner/Mazel, 1979.

Chapman, J.W. and Boersma, F: Learning disabilities, locus of control, and mother attitudes. Journal of Educational Psychology, 1979, 71, 250-258.

Compas, B.E., Adelman, H.S., Freundl, P.C., Nelson, P. and Taylor, L: Parent and child causal attributions during clinical interviews. Journal of Abnormal Child Psychology, 1982, 10(1), 77-84.

Compas, B.E., Friedland-Bandes, R., Bastien, R. and Adelman,

H.S: Parent and child causal attributions related to the child's clinical problem. Journal of Abnormal Child Psychology, 1981, 9(3), 389-398.

Cunningham, C.E. and Barkley, R.A: The effects of methylphenidate on the mother-child interactions of hyperactive identical twins. Developmental Medicine and Child Neurology, 1978, 20, 634-642.

DeCharms, R: Personal causation. New York: Academic Press, 1968.

Easterbrooks, M.A. and Lamb, M.E: The relationship between quality of infant-mother attachment and infant competence in initial encounters with peers. Child Development, 1979, 50, 380-387.

Egeland, B. and Sroufe, L.A: Attachment and early maltreatment. Child Development, 1981, 52, 44-52.

Ellis, A. and Grieger, R: R.E.T.: Handbook of rational-emotive therapy. New York: Springer, 1977.

Emery, R.E. and O'Leary, K.D: Marital discord and child behavior problems in a nonclinic sample. Journal of Abnormal Child Psychology, 1984, 12(3), 411-420.

Emery, R.E., Weintraub, S. and Neale, J.M: Effects of marital discord on the school behavior of children of schizophrenic, affectively disordered and normal parents. Journal of Abnormal Child Psychology, 1982, 10(2), 215-228.

Eyberg, S.M. and Johnson, S.M: Multiple assessment of

behavior modification with families. Journal of Consulting and Clinical Psychology, 1974, 42(4), 594-606.

Fagot, B.I: The consequents of problem behavior in toddler children. Journal of Abnormal Child Psychology, 1984, 12(3), 385-396.

Farron, D.C. and Haskins, R: Reciprocal influence in the social interactions of mothers and 3 year old children from different socioeconomic backgrounds. Child Development, 1980, 51, 780-791.

Firestone, P., Kelly, M.J. and Fike, S: Are fathers necessary in parent training groups? Journal of Clinical Child Psychology, 1980, 9, 44-47.

Firestone, P. and Witt, J.E: Characteristics of families completing and prematurely discontinuing a behavior parent training program. Paper presented at the Canadian Psychological Association Convention, Calgary, 1980.

Forehand, R. and Atkeson, B.M: Generality of treatment effects with parents as therapists: A review of assessment and implementation procedures. Behavior Therapy, 1977, 8, 575-593.

Forehand, R., King, H.E., Peed, S. and Yonder, P: Mother-child interactions: Comparison of a non-compliant clinic group and a nonclinic group. Behavior Research and Therapy, 1975, 13, 79-84.

Forehand, R. and Peed,S: Training parents to modify noncompliant behavior of their children. In A.J. Finch and P.C. Kendall (Eds.), Treatment and research in child psychopathology. New York: Spectrum, 1979.

Forehand, R., Rogers, T., McMahon, R.J., Wells, R.C. and Griest, D.L: Teaching parents to modify child behavior problems: An examination of some follow-up data. Journal of Pediatric Psychology, 1981, 6(3), 313-322.

Forehand, R. and Scarboro, M.E: An analysis of children's oppositional behavior. Journal of Abnormal Psychology, 1975, 3(1), 27-31.

Forehand, R., Sturgis, E.T., McMahon, R., Aguar, D., Green, K., Wells, K.C. and Breiner, J: Parent behavioral training across time and from home to school. Behavior Modification, 1979, 3, 3-25.

Forehand, R., Wells, K.C. and Griest, D.L: An examination of the social validity of a parent training program. Behavior Therapy, 1980, 11, 488-502.

Forehand, R., Wells, K.C. and Sturgis, E.T: Predictors of child noncompliant behavior in the home. Journal of Consulting and Clinical Psychology, 1978, 46(1), 179.

Frodi, A.M. and Lamb, M.E: Child abusers' responses to infant smiles and cries. Child Development, 1980, 51, 238-241.

Gaines, R., Sandgrund, A., Green, A.H. and Power, E: Etiological factors in child maltreatment: A

multivariate study of abusing, neglecting and normal mothers. Journal of Abnormal Psychology, 1978, 87, 531-540.

Gelfand, D.M. and Hartmann, D.P: Behavior therapy with children: A review and evaluation of research methodology. Psychological Bulletin, 1968, 69, 204-215.

Giambra, L.M: Independent dimensions of depression: A factor analysis of three self-report depression measures. Journal of Clinical Psychology, 1977, 33, 928-935.

Giles, D.E. and Rush, A.J: Relationship of dysfunctional attitudes and dexamethasone response in endogenous and nonendogenous depression. Biological Psychiatry, 1982, 17(11), 1303-1314.

Golin, S. and Hartz, M.A: A factor analysis of the Beck Depression Inventory in a mildly depressed population. Journal of Clinical Psychology, 1979, 35(2), 322-325.

Gordon, S.B. and Davidson, N: Behavioral parent training. In A.S. Gurman and D.P. Kniskern (Eds.), Handbook of family therapy. New York: Brunner/Mazel, 1981.

Griest, D.L., Wells, K.C. and Forehand, R: An examination of predictors of maternal perceptions of maladjustment in clinic-referred children. Journal of Abnormal Psychology, 1979, 88, 277-281.

Hammen, C.L: Depression in college students: Beyond the

Beck Depression Inventory. Journal of Consulting and Clinical Psychology, 1980, 48, 126-128.

Herbert, E.W. and Baer, D.M: Training parents as behavior modifiers: Self-recording of contingent attention. Journal of Applied Behavior Analysis, 1972, 5, 139-149.

Hetherington, E.M., Cox, M. and Cox, R: The aftermath of divorce. In J.H. Stevens and M. Mathews (Eds.), Mother-child father-child relations. Washington, D.C.: NAEYC, 1977.

Hetherington, E.M., Cox, M. and Cox, R: Family interact and the social, emotional and cognitive development of children following divorce. Paper presented at the Symposium on the Family: Setting Priorities, 1978.

Hetherington, E.M. and Frankie, G: Effects of parental dominance, warmth and conflict on imitation in children. Journal of Personality and Social Psychology, 1967, 6(2), 119-125.

Hollingshead, B: Four factor index of social status. New Haven, Conneticut, 1975.

James, W: The principles of psychology. New York: Holt, 1890.

Johnson, S.M. and Christensen, A: Multiple criteria follow-up of behavior modification with families. Journal of Abnormal Child Psychology, 1975, 3(2), 135-154.

Johnson, S.M. and Lobitz, G.K: The personal and marital

adjustment of parents as related to observed child deviance and parenting behaviors. Journal of Abnormal Child Psychology, 1974, 2(3), 193-207.

Jones, E.E. and Nisbett, R.E: The actor and observer: Divergent perceptions of the causes of behavior. In E.E. Jones, D. Kanouse, H.H. Kelly, R.E. Nisbett, S. Valins and B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. New York: General Learning Press, 1972.

Kagan, J. and Tulkin, S.R: Social class differences in child rearing during the first year. In H.R. Schaefer (Ed.), Origins of human social relations. New York: Academic Press, 1971.

Kelly, M.L: Blueprints for building a happier home, or, how to become a skilled child behavior builder. Parent training manual, 1978.

Kelly, M.L., Embry, L.H. and Baer, D.M: Skills for child management and family support: Training parents for maintenance. Behavior Modification, 1979,3(3),373-396.

Kent, R: A methodological critique of "Interventions for boys with conduct problems". Journal of Consulting and Clinical Psychology, 1976, 44, 297-299.

Klein, D.C. and Seligman, M.E.P: Reveral of performance deficits and perceptual deficits in learned helplessness and depression. Journal of Abnormal Psychology, 1976, 85, 11-26.

LaGreca, A.M. and Quay, H.C: Behavior disorders of children. In N.S. Endler and J. McV.Hunt (Eds.), Personality and behavior disorders. (2nd ed.). New York: Wiley. 1984.

Langner, T.S., Gersten, J.C., Wills, T.A., and Simcha-Fagan, O: The relative roles of early environment and early behavior as predictors of later child behavior. In D.F. Ricks and B.S. Dohrenwend (Eds.), Origins of psycholopathology. New York: Cambridge University Press, 1983.

Larrance, D.T. and Twentyman, C.T: Maternal attributions and child abuse. Journal of Abnormal Psychology, 1983, 92, 449-457.

Lazarus, R.S: Psychological stress and the coping process. New York: McGraw-Hill, 1966.

Lewis, M. and Wilson, C.D: Infant development in lower-class American families. Human Development, 1972, 15, 112-127.

Landau, R.J. and Goldfried, M.R: The assessment of schemata: A unifying framework for cognitive, behavioral and traditional assessment. In P.C. Kendall and S.D. Hollon, Cognitive-behavioral interventions: Assessment methods. New York: Academic, 1980.

Lorber, R., Felton, D.K. and Reid, J.B: A social learning approach to the reduction of coercive processes in child abusive families: A molecular analysis.

Advances in Behavior Research and Therapy, 1984, 6, 29-45.

Lorber, R., Littman, D. and Reid, J.B: The effects of problematic behavior upon environmental tracking skills. Paper presented at the American Psychological Association, New York, September, 1979.

Lorber, R., Reid, J.B. and Simard, K: Parent perception: Behavior tracking skills in distressed and nondistressed environments. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, San Francisco, California, December, 1979.

Lytton, H: Parent-child interaction: The socialization processes observed in twin and singelton families. New York: Plenum, 1980.

MacNamara, M: Helping children through their mother. Journal of Child Psychology and Psychiatry, 1963, 4, 29-46.

Mash, E.J., Johnston, C., and Kovitz, K: A comparison of the mother-child interactions of physically abused and nonabused children during play and task situation. Journal of Clinical Child Psychology, 1983, 12, 337-346.

Matas, L., Arend, R.A. and Sroufe, L.A: Continuity of adaptations in the second year: The relationship between quality of attachment and later competence.

Child Development, 1978, 49, 547-556.

McCoy, K: Coping with teenage depression. New York: New American Library, 1982.

Meichenbaum, D: Cognitive modification of test anxious college students. Journal of Consulting and Clinical Psychology, 1972, 39, 370-380.

Meichenbaum, D: Cognitive-behavior modification: An integrative approach. New York: Plenum Press, 1977.

Meichenbaum, D. and Cameron, R: The clinical potential of modifying what clients say to themselves. Psychotherapy: Theory, Research and Practive, 1974, 11(2), 103-117.

Messer, S.B. and Lewis, M: Social class and sex differences in the attachment and play behavior of the year old child. Merrill-Palmer Quarterly, 1972, 18, 295-306.

Metalsky, G.I. and Abramson, L.Y: Attributional styles: Towards a framework for conceptualization and assessment. In P.C. Kendall and S.D. Hollon (Eds.), Cognitive-behavioral interventions: Assessment methods. New York: Academic Press, 1980.

Miller, W.R. and Seligman, M.E.P: Depression and learned helplessness in man. Journal of Abnormal Psychology, 1975, 84, 228-238.

Mowry, D.D: Attribution in families of delinquent and nondelinquent adolescents. PhD Dissertation, Washington State University, 1975.

Nay, R.W: A systematic comparison of instructional techniques for parents. Behavior Therapy, 1975, 6, 14-21.

Neisser, U: Cognition and reality: Principles and implications of cognitive psychology. San Francisco, W.H. Freeman and Co., 1976.

Newberger, C.M: Parental conceptions of children and child-rearing: A structural-developmental analysis. PhD Dissertation, Harvard University School of Education, 1977.

Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Bent, D.H: Statistical package for the social sciences. New York: McGraw-Hill, 1975.

Novaco, R.W: Stress inoculation: A cognitive therapy for anger and its application to a case of depression. Journal of Consulting and Clinical Psychology, 1977(a), 45(4), 600-608.

Novaco, R.W: Stress inoculation approach to anger management in the training of low enforcement officers. American Journal of Community Psychology, 1977(b), 5(3), 322-346.

Novaco, R.W: Therapists manual for stress inoculation training: Therapeutic interventions for anger problems. California: University of California, Irvine, 1978.

O'Dell, S: Training parents in behavior modification: A

review. Psychological Bulletin, 1974, 81, 418-433.

Olweus, D: Stability of aggressive reaction patterns in males. Psychological Bulletin, 1979, 86, 852-875.

Palkes, H., Stewart, M. and Freedman, J: Improvement in maze performance of hyperactive boys as a function of verbal-training procedures. Journal of Special Education. 1972, 5(4), 337-342.

Palkes, H., Stewart, M. and Kahana, B: Porteus maze performance of hyperactive boys after training in self-directed verbal commands. Child Development, 1968, 39, 817-826.

Parke, R.D. and Collmer, C.W: Child abuse: An interdisciplinary analysis. In E.M. Hetherington (Ed), Review of Child Development Research, Vol. 5. Chicago: University of Chicago Press, 1975.

Patterson, G.R: Retraining of aggressive boys by their parents: A review of the literature and follow-up evaluation. Canadian Psychiatric Association Journal, 1974,(a), 19, 142-158.

Patterson, G.R: Interventions for boys with conduct problems: Multiple settings, treatments and criteria. Journal of Consulting and Clinical Psychology, 1974(b), 42(4), 471-481.

Patterson, G.R: The aggressive child: Victim and architect of a coercive system. In E.J. Mash, L.A. Hamerlynck and L.C. Handy (Eds), Behavior modification and

families. New York: Brunner/Mazel, 1976

Patterson, G.R., Cobb, J.A. and Ray, R.S: A social engineering technology for training the families of aggressive boys. In H.E. Adams and I.P. Unikel (Eds), Issues and trends in behavior therapy. Illinois: Charles C. Thomas, 1973.

Patterson, G.R. and Dawes, R.M: A Guttman scale of children's coercive behavior. Journal of Consulting and Clinical Psychology, 1975, 43, 594.

Patterson, G.R. and Fleischman, M.J: Maintenance of treatment effects: Some considerations concerning family systems and follow-up data. Behavior Therapy, 1979, 10, 168-185.

Patterson, G.R., Littman, R.A and Hinsey, W.C: Parental effectiveness as reinforcers in the laboratory and its relation to child-rearing practices and child adjustment in the classroom. Journal of Personality, 1964, 32, 180-199.

Patterson, G.R. and Reid, J.B: Reciprocity and coercion: Two facets of social systems. In C. Neuringer and J. Michael (Eds.), Behavior modification in clinical psychology. New York: Appelton-Century-Crofts, 1970.

Patterson, G.R. and Reid, J.B: Intervention for families of aggressive boys: A replication study. Behavior Research and Therapy, 1973, 11, 383-394.

Peed, S.F: Generalization to the home of behavior modified

in a parent training program for non-compliant children. PhD Disseration, University of Georgia, 1975.

Posner, M.I: Chronometric explorations of mind. New York: John Wiley and Sons, 1978.

Radin, N: Father-child interactions and the intellectual functioning of four-year-old boys. Developmental Psychology, 1972, 6, 353-361.

Radin, N: Observed paternal behaviors as antecedents of intellectual functioning in young boys. Developmental Psychology, 1973, 8(3), 369-376.

Reisinger, J.J., Frangia, G.W. and Hoffman, E.H: Toddler management training: Generalization and marital status. Journal of Behavior Therapy and Experimental Psychiatry, 1976, 7, 335-340.

Reisinger, J.J., Ora, J.P. and Frangia, G.W: Parents as change agents for their children: A review. Journal of Community Psychology, 1976, 4, 103-123.

Richman, N., Stevenson, J. and Graham, P.J: Preschool to school: A behavioral study. New York: Academic Press, 1982.

Rizley, R: Depression and distortion in the attribution of causality. Journal of Abnormal Psychology, 1978, 87(1), 32-48.

Sadler, O.W. and Seyden, T: A guide for teaching child management to parents. Archives of the Behavioral

Sciences, 1976, 47.

Sadler, O.W., Seyden, T., Howe, B. and Kaminsky, T: An evaluation of "groups for parents": A standardized format encompassing both behavioral and humanistic methods. Journal of Community Psychology, 1976, 4, 157-165.

Schachter, S: The psychology of affiliation: Experimental studies of the sources of gregariousness. Stanford: Stanford University Press, 1959.

Schachter, S. and Singer, J.E: Cognitive, social and physiological determinants of emtional state. Psychological Review, 1962, 69, 379-399.

Seitz, R: Five psychological measures of neurotic depression: A correlational study. Journal of Clinical Psychology, 1970, 26, 504-505.

Seligman, M.E.P: Helplessness. San Francisco: Freeman, 1975.

Seligman, M.E.P., Abramson, L.Y., Semmel, A. and Von Baeyer, C: Depressive attributional style. Journal of Abnormal Psychology, 1979, 88(3), 342-347.

Shaw, B.F., Steer, R.A., Beck, A.T. and Schut, J: The structure of depression in heroin addicts. British Journal of Addiction, 1979, 74, 295-303.

Snyder, M. and Uranowitz, S: Reconstructing the past: Some cognitive consequences of person perception. Journal of Personality and Social Psychology, 1978, 36,

941-950.

Spinetta, J.J: Parental personality factors in child abuse. Journal of Consulting and Clinical Psychology, 1978, 46, 1409-1414.

Stollak, G.E., Messe, L.A., Michaels, G.R., Buldain, R., Catlin, R.T. and Paritee, F: Parental interpersonal perceptual style, child adjustment and parent-child interactions. Journal of Abnormal Child Psychology, 1982, 10(1), 61-76.

Stringer, S.A. and LaGreca, A.M: Correlates of child abuse potential. Journal of Abnormal Child Psychology, 1985, 13(2), 217-226.

Taplin, P.S. and Reid, J.B: Changes in parent consequences as a function of family intervention. Journal of Consulting and Clinical Psychology, 1977, 45(6), 973-981.

Thomas, A. and Chess, S: Temperament and development. New York: Brunner/Mazel, 1977.

Wahler, R.G: Setting generality: Some specific and general effects of child behavior therapy. Journal of Applied Behavior Analysis, 1969, 2, 239-246.

Wahler, R.G: Some structural aspects of deviant child behavior. Journal of Applied Behavior Analysis, 1975, 8, 27-42.

Wahler, R.G: The insular mother: Her problems in parent-child treatment. Journal of Applied Behavior

Analysis, 1980, 13, 207-219.

Waters, E: The reliability and stability of individual differences in infant-mother attachment. Child Development, 1978, 49, 483-494.

Weckowicz, T.E., Muir, W., and Cropley, A.J: A factor analysis of the Beck Depression Inventory. Journal of Consulting and Clinical Psychology, 1967, 31, 23-28.

Weiner, B: The role of affect in rational (attributional) approaches to human motivation. Educational Researcher, 1980, July, 4-11.

Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S.A. and Rosenbaum, R.M: Perceiving the causes of success and failure. New York: General Learning Press, 1971.

Weiner, B., Graham, S. and Chandler, C: An attributional analysis of pity, anger and guilt. Unpublished paper, 1981.

Weiner, B., Russell, D. and Lerman, D: Affective consequences of causal ascriptions. In J.H. Harvey, W.J. Ickes, and R.F. Kidd (Eds.), New dinensions in attributional research, Vol. 2. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1978.

Wells, K: An attributional analysis of delinquency. PhD Dissertation, University of Colorado at Boulder, 1976.

Wells, K.C. and Forehand, R: Childhood behavior problems in the home. In S.M. Turner, K.S. Calhoun, and H.E. Adams (Eds.), Handbook of behavior therapy. New York: Wiley,

1980.

Williams, C.A. and Forehand, R: An examination of predictor variables for child compliance and noncompliance. Journal of Abnormal Child Psychology, 1984, 12(3), 491-504.

Wolfe, D.A: Child-abusive parents: An empirical review and analysis. Psychological Bulletin, 1985, 97(3), 462-482.

Zegiob, L.E. and Forehand, R: Maternal interactive behavior as a function of race, socioecomonic status and sex of child. Child Development, 1975, 46, 564-568.

APPENDIX A

APPENDIX A

PARENT CONSENT AND INFORMATION FORMS

Dear Parent:

I am presently conducting research to complete my doctorate in Psychology. I am studying child behavior problems in the hope of understanding how a child who repeatedly fails to comply with parental requests, affects the family as a whole and especially the mother's feelings about herself and her child. Many current methods of helping families with their difficulties are inadequate, therefore, I am hoping to learn more about what parents need to help them, so better programs can be developed in the future.

The study involves about one and one-half hours total time. Most of that time is needed for you to complete a questionnaire on child behavior and discipline. About a half hour will be needed for you to view a videotaped sequence of a mother and child playing together. This can be done at your child's school so as to be accessible to you. Your child's teacher will also be completing a brief rating scale in regard to the behavior of all the boys in her/his classroom whose parents returned the consent form. This is a very general behavior rating form which will not single your child out in any way except as a part of the larger group of boys in the classroom.

None of the results of the questionnaires or your responses to the videotape will be devulged to any school or government

personnel or anyone elsewhere, unless you specifically wish they be sent to someone such as a therapist. I am looking at parent attitudes in general in many families so your results will only be part of a large summary and discussion of the overall results which will appear in my dissertation. If you wish a verbal report of the interpretation of your specific results, this may also be provided to you. All data will be destroyed upon completion of the dissertation.

I would very much appreciate your participation in my research. If you would like more information please call me at 247-2023.

If you are interested in participating in this important research, please complete the bottom form and return it to myself in the envelope provided.

Thank you.

Sincerely,

Linda J. Matsalla, MSc.,

Certified Psychologist.

Yes, I would like to participate in your research on Parents' Attitudes:

NAME_____CHILD'S NAME_____

SCHOOL_____GRADE_____

TEACHER'S NAME_____

HOME ADDRESS_____PHONE_____

UNIVERSITY OF CALGARY

DEPARTMENT OF PSYCHOLOGY

Parental Attitudes Towards Child Behavior

Parent Consent Form

I,_____in agreeing to participate in the project described in the covering letter hereby certify that I fully understand that:

1) All information collected in the course of my participation will be treated in strictest confidence. To insure anonymity, all information will be coded so that no names are associated with the data. Further, it should be emphasized that none on the information collected on a given individual will be reported or made available to anyone, including teachers, school officials, government officials or any other person. However, if child abuse and/or neglect is suspected, the investigator is legally bound to give the name of the family to the Child Protection branch of the Alberta Social Services.

2) My participation is voluntary and I have the right to withdraw from the study at any time.

3) The project is an independent study of the investigator and summaries of the general findings may appear in a doctoral dissertation. In that publication only the name of the school system and grades studied will be reported.

Again, no individuals will be identified in any form.

4) Upon completion of the study, the investigator will provide parents with a summary of the general findings of the study, if requested, and also a verbal report of the interpretation of your individual findings.

_____ _____

Participant's signature Date

GENERAL INFORMATION

NAME OF CHILD_____

ADDRESS_____PHONE_____

PARENTS:

	Father	Mother
Name:	_____	_____
Birthdate:	_____	_____
Place of Birth:	_____	_____
Years of Schooling:	_____	_____
Other Training:	_____	_____
Occupation:	_____	_____

CHILD:

Sex: _____

Date of Birth: _____

Years of Schooling: _____

Present Grade: _____

SIBLINGS:

	1	2	3	4	5
Name:	_____	_____	_____	_____	_____
Sex:	_____	_____	_____	_____	_____
Date of Birth:	_____	_____	_____	_____	_____
Years of Schooling:	_____	_____	_____	_____	_____
Present Grade:	_____	_____	_____	_____	_____

Health, Learning or

Physical Difficulties? _____ _____ _____ _____ ____

Describe_____

How well do the children get along with eachother?

1. Rarely fight or argue.
2. Frequently fight and argue.
3. Fight most of the time.

HISTORY:

Does your child have any of the following difficulties?

Vision difficulties.....yes no

Describe_____

Hearing difficulties..... yes no

Describe_____

Physical handicaps.....yes no

Describe_____

Learning problems.....yes no

Describe_____

Emotional problems.....yes no

Describe_____

Behavior and disciplining problems.....yes no

Describe_____

Was he slow to learn to talk or walk.....yes no

Other problems?

1_____

2_____

Is this child the natural child of

Mother.....yes no

Father.....yes no

APPENDIX B

APPENDIX B

TEACHER RATING AND CONSENT FORMS

UNIVERSITY OF CALGARY

DEPARTMENT OF PSYCHOLOGY

Parental Attitudes Towards Child Behavior

Teacher Consent Form

I,_____in agreeing to participate in the project described by the investigator hereby certify that I fully understand that:

1) All information collected in the course of my participation will be treated in strictest confidence. To insure anonymity, all information will be coded so that no names are associated with the data. Further, it should be emphasized that none of the information collected on a given individual will be reported or made available to anyone, including teachers, school officials, government officials or any other person. However, if child abuse and/or neglect is suspected, the investigator is legally bound to give the name of the family to the Child Protection branch of the Alberta Social Services.

2) My participation is voluntary and I have the right to withdraw from the study at any time.

3) The project is an independent study of the investigator and summaries of the general findings may appear in a

doctoral dissertation. In that publication only the name of the school system and grades studied will be reported. Again, no individuals will be identified in any form.

_____ _____

Participant's signature Date

CLASSROOM RATING FORM

Please look at all the boys in your classroom and try to rate them according to the following criteria:

1. Compliance to adult requests in school and on the playground:

Names of Boys

Poor

Average

Good

2. Ability to apply himself and concentrate on school work:

Poor

Average

Good

3. Ability to get along with peers and popularity:

Poor

Average

Good

APPENDIX C

APPENDIX C

PARENTAL ATTITUDE SURVEY

Directions: Please read each question and try to imagine your son in each situation described. Choose the reason which would best describe your son's reason for behaving in the manner described. Please choose only one reason for each question.

1. Suppose your son helps his little sister get ready for an outing; what reason would you give for your son helping?
   a) He is the kind of kid who helps others.
   b) His sister is a likeable kid and it is easy for anyone to help her.
   c) You asked him to help and he could not see a way out of it.
   d) He had a good day and was feeling particularly helpful.
2. Suppose a friend has been giving your son trouble about the way he treats his dog and your son angrily tells him to mind his own business. What reason would you give for your son's behavior?
   a) Your son is the type who tells others what he thinks.
   b) Your son was having a bad day and he could not avoid the argument.
   c) His friend was bugging him a lot that day and making it tough for him to be patient.
   d) His friend is an annoying person who gets most people upset.

3. Suppose that if after playing together with his friend and some lego blocks, your son tells his friend how much he liked the house that his friend made. What reason would you give for your son paying his friend this compliment?

   a) His friend asked him if he liked his house so your son told him what he thought.

   b) Your son is the type who lets people know what he thinks.

   c) His friend is very good with lego blocks and always makes very good houses.

   d) Your son was feeling good that day so wanted to make his friend feel good too by saying something nice.

4. Suppose a school teacher became quite upset with your son's fighting with the other children in the class and has a meeting to discuss it with you. What reason would you give for what has happened?

   a) He does not behave himself and does not care to.

   b) He becomes overwhelmed and over-excited in large group situations and can not restrain himself.

   c) He had a bad day and took his frustrations out on the other children.

   d) Another child was egging him on and trying to get him into trouble.

5. Suppose you hear that your son was caught shoplifting some candy at a local store, what reason would you give for his behavior?

   a) The store had the candy in too tempting a place in the

store and he could not resist the temptation.

b) He is the type of child who has trouble controlling his impulses.

c) He loves in a bad neighborhood where the children often shoplift for kicks. He felt that he had to go along to keep his friends.

d) He had a bad day and had no money, thus, could not control his impulse to take the candy.

6. Suppose your son is acting up (teasing, being noisy, not doing what he is told) at a family reunion. What reason would you give for this behavior?

a) He felt like he was being ignored in the large group and wanted some attention.

b) He is the type of child who has trouble controlling himself.

c) Someone at the reunion got him excited by rough-housing too much.

d) Large group situations overwhelm him.

7. Suppose a friend is having trouble with a puzzle and your son helps him with it. What reason would you give for your son helping his friend?

a) The friend is a nice kid who helps others all the time and deserves it in return.

b) Your son was passing by when his friend asked for help and your son didn't see how he could turn him down.

c) Your son is the kind of kid who helps his friends.

d) Your son likes doing puzzles so did not mind helping his friend.

8. Suppose that some afternoon your son is watching you work, and he tells you that you do a good job. What reason do you give for him saying this?

a) Mom is a hard worker and does a good job and deserves compliments.

b) He is the kind of kid who cares about what others do and likes to praise them.

c) He was preparing to do something and needed his mom's permission to do it, and thought that a compliment might help him get permission.

d) He was feeling good that day and wanted to make others feel good too.

9. Suppose your son gave someone an old bad candy and the person got sick after eating it, what reason would you give for him giving the candy to the person?

a) Your son was not aware that the candy was bad and did not want it himself, so he gave it away.

b) The other person wanted the candy and insisted on taking it. Your son gave it to him even though he knew it was bad.

c) Your son is the type of child who gives away his candy without much thought as to whether the other person should have it.

d) The other kids in the neighborhood are the type who get

what they can from other people and he did not have much choice except to give it to them.

10. Suppose your son is walking down the street and sees an old man with a cane who is barely moving and he says something to insult the old man. What reason would you give for your son doing this?

    a) The old man said something he didn't like.

    b) Your son always says what he wants to whomever he wants.

    c) Your son was in a hurry when the old man got in his way and he almost tripped over him.

    d) The old man is always teasing the youngsters in the neighborhood.

11. Suppose your son helps his dad wash the car when he is not required to do it. What reason would you give for his helping?

    a) His father is the kind of person who helps others and deserves it in return.

    b) His father seemed tired that day and your son decided to help him out.

    c) Your son is the type of child who likes to help others.

    d) Your son had a good day and decided to help his father out.

12. Suppose while playing one day your son breaks something which is quite valuable to your neighbor. What reason would you give for his breaking the item?

    a) Your son is very clumsy and careless and often breaks

things.

b) The item was difficult to hold and slipped from his hands.

c) Your son was running and the item was in his way.

d) There are a lot of breakable things at the neighbor's house and children cannot play without breaking things.

13. Suppose your son is playing a ball game with some friends and he makes the final play to win the game, what reason would you give for this?

a) Your son is athletic enough to be capable of this.

b) Your son was open for the pass, the goaly was distracted and your son was close to the goal.

c) His team always plays well.

d) He was playing extra good that day.

14. Suppose your son comes in late for supper after playing at his friend's house, what reason would you give for his tardiness?

a) He makes decisions based on what he feels at the moment.

b) All the fun the children were having made tham forget about the time.

c) He was not very hungry so he decided to stay and play.

d) His friends always pressure him to stay longer and play. He has trouble saying "no" to his friends.

15. Suppose you asked your son to clean his room and you go up an hour later and he has not done it. What reason would you give for this?

a) He usually doesn't do things he doesn't like to do.

b) He was watching cartoons and he forgot about it.

c) His room is usually too dirty for him to clean by himself.

d) He was too tired that day and did not want to clean his room.

16. Suppose your son sees his friend struggling with his math homework and he goes to help him, what reason would you give for him helping?

a) Your son likes math and is very good at it.

b) His friend usually helps your son with other school subjects that your son has difficulty with and deserves it in return.

c) Your son wanted a favor from his friend so decided to help him so his friend would agree to the favor.

d) His friend asked for help and your son didn't feel he could turn him down.

17. Suppose your son has a birthday party to go to and you ground him for some things he has done. Your son goes anyway. What reason would you give for disobeying you.

a) Your restriction was unfair and he should not have obeyed it.

b) He decides what he wishes to do on his own and usually doesn't listen to his parents.

c) Being with his friends is very important to his socialization so he needed to go.

d) He felt you were being unfair and was angry about the punishment so deliberately disobeyed you.

18. Suppose some kids came up to your son one afternoon while he was playing outside and started talking to him. Your son hits one kid as hard as he can and the kids leave. What reason would you give for your son's behavior?

a) Those kids make it difficult for all the kids in the neighborhood and he had no way to avoid the fight.

b) They started the fight by threatening your son.

c) Your son is often very impulsive and often hits others without thinking.

d) Your son had been having a bad day and had little patience.

19. Suppose that in a discussion with your son about growing up you tell him that he is going to have to take more responsibility for what he does in the future. What reason would you give for his lack of responsibility in the past and present?

a) He has never been given much responsibility and has a hard time accepting it now.

b) He is not a very responsible child.

c) He has so many things on his mind that he usually forgets about his responsibilities.

d) He did not feel he needed to be responsible in most situations in the past.

20. Suppose your son get the "Best Behavior" pin in his school

which is known to be given very rarely by the teacher. What reason would you give for his getting the pin?

a) He is a well-behaved child and deserves the pin.

b) He was quiet that day because he was feeling good.

c) His best friend, who is rowdy, was away from school that day.

d) His school and teacher are good so he is well-behaved.

21. Suppose your son is mean to the family dog. What reason would you give for his behavior?

a) He had a bad day and could not help taking out his frustrations on the dog.

b) He is the type of child who is often mean to animals.

c) The dog was getting in his way and bothering him.

d) The dog is rowdy and pesty and aften needs to be disciplined.

22. Suppose your son volunteered to help a handicapped child in his classroom with dressing and eating. What reason would you give for his volunteering?

a) He is the type of child who likes to help others.

b) He wanted to please the teacher since he has been having trouble with her lately.

c) He was the only child old enough to help so he had no choice when the teacher asked him to volunteer.

d) The handicapped child was a good friend of his so he did not mind helping him.

23. Suppose your son has been playing with some friends at the

school playground and he suddenly finds himself in trouble for being disorderly. What reason would you give for his actions?

a) His friends insisted that he go along with them in their activities so he had no choice.

b) He is often disruptive in a group of friends.

c) He and his friends are often picked on by the neighbors who live close to the playground and they often report them when they are not doing anything wrong.

d) He was particularly rowdy that day because of recent trouble he had been having at home and at school.

24. Suppose your son's friend came by and wanted to talk to your son about some of the problems he was having. What reason would you give for your son listening to him?

a) Your son is a good listener and kids feel that they can confide in him.

b) Your son didn't feel he could turn him down since he seemed to be upset that day.

c) The boy had always been a good friend to your son and deserved to be listened to when he was having some problems.

d) Your son was feeling particularly helpful that day so didn't mind helping his friend out.

25. Suppose your son broke his sister's new favorite doll. What reason would you give for this?

a) He was jealous that she got a new toy and in his anger

broke the doll.

b) The doll was laying on the floor and he accidentally stepped on it.

c) He is the type of child who impulsively breaks things without really meaning to do it.

d) His sister is always taunting and teasing him and makes him angry.

26. Suppose one night while you are out and he is being babysat, your son gets into the liquor cabinet, gets drunk and sick. What reason would you give for his behavior.

a) He is the type of child who gets into things if not watched carefully.

b) The babysiter was not very responsible and was drinking with some friends of hers. They encouraged your son to try it too.

c) He was feeling mischievous that night and decided to try it.

d) Being left with a babysitter upsets him and makes him do silly things.

27. Suppose your son got the best mark on a test in class. What reason would you give for this?

a) He is a smart kid and capable of doing this.

b) He had studied a lot the night before.

c) He likes his teacher and likes to please her by doing good work.

d) He had a good night sleep, was feeling good, and was

able to concentrate better than usual that day.

28. Suppose his sister was being picked on by some older boys and your son came to her rescue. What reason would you give for this?

a) He likes his sister and is very protective of her.

b) He knows he will get in trouble at home if he doesn't protect her.

c) He wanted to show the older boys that he was tough.

d) He knew his parents and neighbors would be watching him so he had to stick up for her.

APPENDIX D

APPENDIX D

DISCIPLINE QUESTIONNAIRE

There are two parts for each question. First indicate what you would do. Enter the number that corresponds to that response. Next, go to the corresponding number and find the reason that most nearly approximates why you chose that response. Enter the letter that corresponds to the reason for your choice of responses. If you have another reason, enter that reason on the line provided. For choices 2 to 6, if you wish to also include choice #8 (restrict privileges) please choose reasons for both numbers.

1. Suppose your child hit another child with a stick. Your son states that the other boy hit him first.

   The appropriate response would be_____

   The reason for that response_____

   Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

   1 2 3 4 5

   _____

   Not at all likely — Highly likely

2. Suppose you asked your son to take the garbage out and he did not do it. Your son stated that he was playing with his toys and forgot.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

3. Suppose you found out your son skipped school today because he was supposed to have a math test.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

4. Suppose your son was caught shoplifting at a local store.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you

think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

5. Suppose you caught your son beating-up another child. Your son states that the other child called him a bad name.

The appropriate response would be_____

The reason for the response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

6. Suppose you told your son to be home at a certain time (a time that you consider to be appropriate for a child his age). He came home considerably later saying he felt he should be allowed to stay out later than you had said.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you

think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

7. Suppose your son was caught greasing the floor in the girls' washroom so they would slip. They said it was just a prank and meant no harm.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

8. Suppose your son threw a baseball through a window of your neighbor's house while playing.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you

think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

9. Suppose your son broke into an abandoned house in the neighborhood with some other kids and smashed the windows in the course of playing cops and robbers

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

10. Suppose your son was supposed to be home for supper at 5:30 p.m. and he did not come home until considerably later, and did not phone to let you know where he was.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do

you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

11. Your son's teacher called home and said your son had a bad attitude toward social studies. Your son says the teacher is always yelling and he doesn't like that.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

12. Suppose you had a neighbor and her little 3-year-old daughter over for coffee one afternoon and your son pushes the girl down and she hurts herself. He states that she was touching his cars.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do

you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

13. Suppose you caught your son making fun of the old lady next door. He states that he thinks she looks funny because she's so old and crippled.

The appropriate response would be_____

The reason for that response_____

Considering your response to the above situation, what do you think the likelihood is of your child doing this again in the future?

1 2 3 4 5

_____

Not at all Highly

likely likely

PART I: WHAT you would do. After selecting one of the following 8, go to the corresponding number and indicate WHY you selected that alternative.

1. Ignore the behavior
2. Physically punish your son.
3. Verbally reprimand your son.
4. Physically punish followed by explanation of why he was wrong
5. Verbally reprimand with an explanation of why he was wrong.
6. Only explain why the behavior was wrong (no punishment).
7. Indicate to him that you think his behavior was appropriate.
8. Restrict privileges (eg. watching T.V., allowance withdrawn).

PART II: WHY you would do that.

1. a) Ignore it because it isn't worth the time or energy to become involved.
   b) Ignore it because I don't really know what is appropriate and therefore I could make a mistake.
   c) Ignore it because by doing so I would indicate to my son that he should sort out things like this for himself.
   d) By ignoring such behaviors they will disappear.
   e) Ignore because I don't consider this to be that wrong.
2. a) Physical punishment (eg. spanking) is an effective procedure to stop undesirable or bad behavior.
   b) Since children don't understand words like right and wrong, physical punishment helps them to distinguish right from wrong.

c) Physical punishment is necessary to learn discipline.

d) Physical punishment is necessary for teaching children to respect rules and authority.

e) Physical punishment helps to indicate to the child the magnitude of wrong.

f) Physical punishment helps instill a sense of guilt that helps children to distinguish right from wrong.

3. a) A verbal reprimand (eg. scolding in a harsh voice) is an effective procedure for stopping undesirable behaviors.

b) A verbal reprimand helps children to learn to distinguish right from wrong.

c) A verbal reprimand is necessary to learn discipline.

d) A verbal reprimand is an effective procedure for teaching children to respect rules and authority.

e) A verbal reprimand helps indicate the magnitude of wrong.

f) Verbal reprimands help instill a sense of guilt that helps children to distinguish right from wrong.

4. a) Physical punishment is necessary for developing a sense of guilt (conscience) while the verbal explanation identifies what behavior is wrong.

b) Physical punishment helps develop a healthy respect for rules and authority while a verbal explanation identifies what behavior is wrong.

c) Physical punishment is frequently necessary to get the child's attention while the verbal explanation identifies why the behavior is wrong.

d) Physical punishment helps develop a sense of guilt (conscience) while the verbal explanation would tell the child why he is wrong.

e) Physical punishment helps develop a healthy respect for rules and authority while a verbal explanation would tell the child why he is wrong.

5. a) A verbal reprimand instead of physical punishment indicates to the child his misconduct is not serious.

b) Physical punishment may make a child learn to hate or resent his parents but it is important, nevertheless, for a child to be disciplined in order that the child develops a sense of guilt (conscience). The verbal explanation tells the child what behavior was wrong.

c) Physical punishment may make a child learn to hate or resent his parents but is important, nevertheless, for a child to be disciplined in order that the child develops a healthy respect for rules and authority. The verbal explanation tells the child what behavior is wrong.

d) Physical punishment may make a child learn to hate or resent his parents but it is important, nevertheless, for a child to be disciplined in order that the child develops a sense of guilt (conscience). The verbal explanation would tell the child why he is wrong.

e) Physical punishment may make a child learn to hate or resent his parents but it is important, nevertheless, for a child to be disciplined in order that the child develops

a healthy respect for rules and authority. The verbal explanation would tell the child why he is wrong.

6. a) Children are naturally motivated to learn what behaviors are good and correct.
   b) Explaining why a behavior is wrong will help the child to develop a sense of what is fair and just.
   c) Children respect parents who provide an explanation and it is out of that respect they learn to obey rules.
7. a) Rewarding good or correct behavior is sufficient to teach what is correct or acceptable behavior.
   b) Rewarding good or correct behavior is sufficient to teach a child about what is fair and just.
   c) Children respect parents who reward them when they have behaved correctly and it is out of that respect they come to obey rules.
8. a) Restricting privileges is a way of emphasizing to him what he did was wrong.
   b) Restricting privileges is a way of demonstrating to the child the magnitude of his wrong or inappropriate behavior, i.e., the loss of a privilege (eg., T.V.) is proportional to the seriousness of the behavior.
   c) Restricting privileges is a means of teaching that there is a price to pay for not acting appropriately.

APPENDIX E

APPENDIX E

BECK DEPRESSION INVENTORY

Pick out the statement in that group which best describes the way you feel today:

A. 0 I do not feel sad.

1 I feel blue or sad.

2a I am blue or sad all the time and I can't snap out of it.

2b I am so sad or unhappy that it is quite painful.

3 I am so sad or unhappy that I can't stand it.

B. 0 I am not particularly pessimistic or discouraged about the future.

1 I feel discouraged about the future.

2a I feel I have nothing to look foreward to.

2b I feel that I won't ever get over my troubles.

3 I feel that the future is hopeless and that things cannot improve.

C. 0 I do not feel like a failure.

1 I feel I have failed more than the average person.

2a I feel I have accomplished very little that is worthwhile or that means anything.

2b As I look back on my life all I can see is a lot of failures.

3 I feel I am a complete failure as a person (parent, husband, wife).

D. 0 I am not particularly dissatisfied.

1a I feel bored most of the time.

1b I don't enjoy things the way I used to.

2 I don't get satisfaction out of anything any more.

3 I am dissatisfied with everything.

E. 0 I don't feel particularly guilty.

1 I feel bad or unworthy a good part of the time.

2a I feel quite guilty.

2b I feel bad or unworthy practically all the time now.

3 I feel as though I am very bad or worthless.

F. 0 I don't feel I am being punished.

1 I have feelings that something bad may happen to me.

2 I feel I am being punished or will be punished.

3a I feel I deserve to be punished.

3b I want to be punished.

G. 0 I don't feel disappointed in myself.

1a I am disappointed in myself.

1b I don't like myself.

2 I am disgusted with myself.

3. I hate myself.

H. 0 I don't feel I am any worse than anybody else.

2a I am critical of myself for my weaknesses or mistakes.

2b I blame myself for my faults.

3 I blame myself for everything bad that happens.

I. 0 I don't have thoughts of harming myself.

1 I have thoughts of harming myself but I would not carry them out.

2a I feel I would be better off dead.

2b I feel my family would be better off if I were dead.

3a I have definite plans about committing suicide.

3b I would kill myself if I could.

J. 0 I don't cry any more than usual.

1 I cry more now than I used to.

2 I cry all the time now. I can't stop it.

3 I used to be able to cry but now I can't cry at all even though I want to.

K. 0 I am no more irritated now than I ever am.

1 I get annoyed or irritated more easily than I used to.

2 I feel irritated all the time.

3 I don't get irritated at all at the things that used to irritate me.

L. 0 I have not lost interest in other people.

1 I am less interested in other people now than I used to be.

2 I have lost most of my interest in other people and have little feeling for them.

3 I have lost all my interest in other people and don't care about them at all.

M. 0 I make decisions about as well as ever.

1 I try to put off making decisions.

2 I have great difficulty in making decisions.

3 I can't make any decisions at all amy more.

N. 0 I don't feel I look any worse than I used to.

1 I am worried that I am looking old or unattractive.

2 I feel that there are permanent changes in my appearance and they make me look unattractive.

3 I feel that I am ugly or repulsive looking.

O. 0 I can work about as well as before.

1a It takes extra effort to get started at doing something.

1b I don't work as well as I used to.

2 I have to push myself very hard to do anything.

3 I can't do any work at all.

P. 0 I can sleep as well as usual.

1 I wake up more tired in the morning than I used to.

2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.

3 I wake up early every day and can't get more than 5 hours sleep.

Q. 0 I don't get any more tired than usual.

1 I get tired more easily than I used to.

2 I get tired from doing anything.

3 I get too tired to do anything.

R. 0 My appetite is no worse than usual.

1 My appetite is not as good as it used to be.

2 My appetite is much worse now.

3. I have no appetite at all any more.

S. 0 I haven't lost much weight, if any, lately.

1 I have lost more than 5 pounds.

2 I have lost more than 10 pounds.

3 I have lost more than 15 pounds.

T. 0 I am no more concerned about my health than usual.

1 I am concerned about aches and pains or upset stomach or constipation.

2 I am so concerned with how I feel or what I feel that it's hard to think of much else.

3 I am completely absorbed in what I feel.

U. 0 I have not noticed any recent change in my interest in sex.

1 I am less interested in sex than I used to be.

2 I am much less interested in sex now.

3 I have lost interest in sex completely.

APPENDIX F

APPENDIX F

ACHENBACH CHILD BEHAVIOR CHECKLIST

FOR AGES 4-16

Below is a list of items that describe children. For each item that describes your child now or within the past 12 months, please circle the 2 if the item is very true or often true of your child Circle the 1 if the item is somewhat or sometimes true of your child. If the item is not true of your child, circle the 0.

0 1 2 1. Acts too young for his/her age

0 1 2 2. Allergy

(describe):_____

0 1 2 3. Argues a lot

0 1 2 4. Asthma

0 1 2 5. Behaves like opposite sex

0 1 2 6. Bowel movements outside toilet

0 1 2 7. Bragging, boasting

0 1 2 8. Can't concentrate, can't pay attention for long

0 1 2 9. Can't get his/her mind off certain thoughts; obsessions

(describe):_____

0 1 2 10. Can't sit still, restless, or hyperactive

0 1 2 11. Clings to adults or too dependent

0 1 2 12. Complains of loneliness

0 1 2 13. Confused or seems to be in a fog

0 1 2 14. Cries a lot

0 1 2 15. Cruel to animals

0 1 2 16. Cruelty, bullying, or meanness to others

0 1 2 17. Day-dreams or gets lost in his/her thoughts

0 1 2 18. Deliberately harms self or attempts suicide

0 1 2 19. Demands a lot of attention

0 1 2 20. Destroys his/her own things

0 1 2 21. Destroys things belonging to his/her family or other children

0 1 2 22. Disobedient at home

0 1 2 23. Disobedient at school

0 1 2 24. Doesn't eat well

0 1 2 25. Doesn't get along with other children

0 1 2 26. Doesn't seem to feel guilty after misbehaving

0 1 2 27. Easily jealous

0 1 2 28. Eats or drinks things that are not food

(describe):_____

0 1 2 29. Fears certain animals, situations, or places, other than school

(describe):_____

0 1 2 30. Fears going to school

0 1 2 31. Fears he/she might think or do something bad

0 1 2 32. Feels he/she has to be perfect

0 1 2 33. Feel or complains that no one loves him/her

0 1 2 34. Feels others are out to get him/her

0 1 2 35. Feels worthless or inferior

0 1 2 36. Gets hurt a lot, accident-prone

0 1 2 37. Gets in many fights

0 1 2 38. Gets teased a lot

0 1 2 39. Hangs around with children who get in trouble

0 1 2 40. Hears things that aren't there

(describe):_____

0 1 2 41. Impulsive or acts without thinking

0 1 2 42. Likes to be alone

0 1 2 43. Lying or cheating

0 1 2 44. Bites fingernails

0 1 2 45. Nervous, highstrung, or tense

0 1 2 46. Nervous movements or twitching

(describe):_____

0 1 2 47. Nightmares

0 1 2 48. Not liked by other children

0 1 2 49. Constipated, doesn't move bowels

0 1 2 50. Too fearful or anxious

0 1 2 51. Feels dizzy

0 1 2 52. Feels too guilty

0 1 2 53. Overeating

0 1 2 54. Overtired

0 1 2 55. Overweight

0 1 2 56. Physical problems without known medical cause:

0 1 2 a. Aches or pains

0 1 2 b. Headaches

0 1 2 c. Nausea, feels sick

0 1 2 d. Problems with eyes

(describe):_____

0 1 2 e. Rashes or other skin problems

0 1 2 f. Stomachaches or cramps

0 1 2 g. Vomiting, throwing up

0 1 2 h. Other (describe):_____

0 1 2 57. Physically attacks people

0 1 2 58. Picks nose, skin, or other parts of body

(describe):_____

0 1 2 59. Plays with own sex parts in public

0 1 2 60. Plays with own sex parts too much

0 1 2 61. Poor school work

0 1 2 62. Poorly coordinated or clumsy

0 1 2 63. Prefers playing with older children

0 1 2 64. Prefers playing with younger children

0 1 2 65. Refuses to talk

0 1 2 66. Repeats certain acts over and over; compulsions

(describe):_____

0 1 2 67. Runs away from home

0 1 2 68. Screams a lot

0 1 2 69. Secretive, keeps things to self

0 1 2 70. Sees things that aren't there

(describe):_____

0 1 2 71. Self-conscious or easily embarrassed

0 1 2 72. Sets fires

0 1 2 73. sexual problems

(describe):_____

0 1 2 74. Showing off or clowning

0 1 2 75. Shy or timid

0 1 2 76. Sleeps less than most children

0 1 2 77. Sleeps more than most children during day and/or night

(describe):_____

0 1 2 78. Smears or plays with bowel movements

0 1 2 79. Speech problem

(describe):_____

0 1 2 80. Stares blankly

0 1 2 81. Steals at home

0 1 2 82. Steals outside the home

0 1 2 83. Stores up things he/she doesn't need

(describe):_____

0 1 2 84. Strange behavior

(describe):_____

0 1 2 85. Strange ideas

(describe):_____

0 1 2 86. stubborn, sullen, or irritable

0 1 2 87. Sudden changes in mood or feelings

0 1 2 88. Sulks a lot

0 1 2 89. Suspicious

0 1 2 90. Swearing or obscene language

0 1 2 91. Talks about killing self

0 1 2 92. Talks or walks in sleep

(describe):_____

0 1 2 93. Talks too much

0 1 2 94. Teases a lot

0 1 2 95. Temper tantrums or hot temper

0 1 2 96. Thinks about sex too much

0 1 2 97. Threatens people

0 1 2 98. Thumb-sucking

0 1 2 99. Too concerned with neatness or cleanliness

0 1 2 100. Trouble sleeping

(describe):_____

0 1 2 101. Truancy, skips school

0 1 2 102. Underactive, slow moving, or lacks energy

0 1 2 103. Unhappy, sad, or depressed

0 1 2 104. Unusually loud

0 1 2 105. Uses alcohol or drugs

(describe):_____

0 1 2 106. Vandalism

0 1 2 107. Wets self during the day

0 1 2 108. Wets the bed

0 1 2 109. Whining

0 1 2 110. Wishes to be of opposite sex

0 1 2 111. Withdrawn, doesn't get involved with others

0 1 2 112. Worrying

0 1 2 113. Please write in any problems your child has that were not listed above:

0 1 2 _____

0 1 2 _____

APPENDIX G

APPENDIX G

INSTRUCTIONS TO PARENTS FOR OBSERVING VIDEOTAPE

You will be observing a 15 minute videotape on the television in front of you, of a mother and child in their own living room, playing. You will have a metal box in front of you with two switches. Place your right hand on the right switch, and your left hand on the left switch.

You will be asked to look for and count (using the switches on the metal box) certain behaviors. With your right hand push the right switch once each time you observe the child showing positive or socially-appropriate behaviors. These are behaviors such as smiling, hugging, complying to the mother's requests, asking appropriate questions, playing nicely. They are behaviors that you would encourage and would like to see more of in your own child.

With your left hand, push the left switch once each time you observe the child showing negative or socially-inappropriate behaviors. These are behaviors such as refusing to complying with the mother's requests, ignoring her, hitting, destroying toys, asking inappropriate questions, making rude noises or faces. These are behaviors that you would discourage and like to see less of in your own child.

APPENDIX H

APPENDIX H

TABLES

Table 7

Achenbach Child Behavior Checklist

	MEAN		S.D.	
	Prob.	Nonprob.	Prob.	Nonprob.
INTERNALIZING SCALE	63.06	54.93	6.82	8.68**
Schizoid	2.33	2.47	2.31	2.01
Depression	6.76	2.86	4.09	2.79**
Uncommunicative	3.46	2.63	2.26	2.18
Obsessive-compulsive	4.30	1.13	2.62	1.68**
Somatic complaints	2.03	1.06	2.38	1.48**
Social withdrawal	9.13	1.33	2.08	1.47**
EXTERNALIZING SCALE	76.47	44.14	3.42	7.89**
Social withdrawal	9.13	1.33	2.08	1.47**
Hyperactive	12.07	1.26	2.89	1.51**
Aggressive	22.76	3.03	3.65	3.06**
Delinquent	7.6	.33	3.30	.78**
TOTAL SCALE	73.20	46.93	3.01	7.99**

**p<.01

Table 8

Discipline Questionnaire

DISCIPLINARY MEASURES	MEAN		S.D.	
Question #:	Prob.	Nonprob.	Prob.	Nonprob.
1	4.067	4.310	1.258	1.442
2	6.200	5.276	2.310	2.266
3	6.700	5.378	1.932	1.953**
4	6.900	5.931	2.107	2.017
5	3.833	4.310	1.206	1.391
6	7.633	6.828	1.129	1.872*
7	5.067	4.552	2.132	1.804
8	6.200	5.724	2.235	1.998
9	6.033	5.690	2.266	1.911
10	7.667	6.103	1.028	2.006**
11	5.567	5.448	2.029	1.785
12	3.700	4.759	1.208	1.806**
13	5.633	5.172	1.956	1.733
DISCIPLINARY STYLE				
1	2.517	2.100	.5085	.4026**
2	2.655	2.267	.4837	.4498**
3	2.621	2.200	.5615	.4068**
4	2.655	2.267	.4837	.4498**
5	2.552	2.100	.5061	.3051**
6	2.862	2.233	.3509	.4302**
7	2.379	2.067	.5615	.3651**

8	2.552	2.100	.5061	.3051**
9	2.586	2.067	.5680	.2537**
10	2.759	2.200	.4355	.4068**
11	2.552	2.133	.5061	.4342**
12	2.655	2.067	.4837	.2537**
13	2.655	2.033	.5526	.1826**

*p<.05

** p<.01

Table 9

Correlations of Beck Depression Inventory

With Other Measures

	PROBLEM-CHILD MOTHERS	NONPROBLEM-CHILD MOTHERS
ACHENBACH		
Schizoid	-.101	.128
Depression	.161	-.292*
Uncommunicative	.025	-.017
Obsessive-compulsive	.128	-.208
Somatic complaints	.160	.240
Social withdrawal	.287	-.152
Hyperactive	.135	.049
Aggression	.412**	-.179
Delinquency	.323*	-.133
Internalizing total	.203	-.011
Externalizing total	.369*	-.009
Total score	.431**	-.165
PARENTAL ATTITUDE SURVEY		
PROSOCIAL BEHAVIOR		
Internal-stable	-.394**	-.224
Internal-unstable	.095	.358*
External-stable	-.315*	.347*
External-unstable	.499**	-.199
ANTISOCIAL BEHAVIOR		
Internal-stable	.456**	.334*

Internal-unstable	-.347*	.013
External-stable	-.225	.059
External-unstable	-.365*	-.407**
DISCIPLINE QUESTIONNAIRE		
Ignore	no score	.014
Physical punishment	.200	.145
Verbal reprimand	.009	-.261
Physical punishment plus restrict privileges	.054	-.039
Verbal reprimand plus restrict privileges	.008	.209
No punishment	.082	.091
Approval	.001	.061
Restrict privileges	-.280	.036
Permissive discipline	-.090	.170
Authoritative discipline	-.125	.007
Authoritarian discipline	.132	.115
CONTROLLABILITY	-.083	-.077
VIDEOTAPE		
Prosocial behavior	-.287	-.069
Antisocial behavior	-.077	-.257
Total behavior	.268	-.143

*p<.05

**p<.01

Table 10

Correlations of Perceptions of Loss of Control of Child Behavior With Other Measures

ACHENBACH	PROBLEM-CHILD MOTHERS	NONPROBLEM-CHILD MOTHERS
Schizoid	.052	-.147
Depression	-.014	.159
Uncommunicative	.051	-.013
Obsessive-compulsive	-.078	-.103
Somatic complaints	.242	-.202
Social withdrawal	-.197	-.042
Hyperactive	-.189	-.041
Aggression	-.049	-.088
Delinquency	-.117	.008
Internalizing total	.037	-.125
Externalizing total	-.127	-.139
Total score	-.133	-.079
PARENTAL ATTITUDE SURVEY		
PROSOCIAL BEHAVIOR		
Internal-stable	-.005	-.180
Internal-unstable	.014	.136
External-stable	-.084	-.086
External-unstable	.045	.177
ANTISOCIAL BEHAVIOR		
Internal-stable	.301*	.210
Internal-unstable	-.283	-.041

External-stable	.065	-.030
External-unstable	-.339*	-.216
DISCIPLINE QUESTIONNAIRE		
Ignore	no score	-.265
Physical punishment	-.248	.077
Verbal reprimand	-.233	-.066
Physical punishment plus restrict privileges	.293*	-.122
Verbal reprimand plus restrict privileges	.017	-.122
No punishment	-.015	.283
Approval	-.136	-.154
Restrict privileges	.011	-.075
Permissive discipline	-.221	-.096
Authoritative discipline	-.125	.045
Authoritarian discipline	.197	-.031
BECK DEPRESSION INVENTORY	-.083	-.077
VIDEOTAPE DATA		
Prosocial behavior	.003	.023
Antisocial behavior	.215	-.209
Total behavior	-.431**	-.031

*p<.05

**p<.01

Table 11

Videotape Data Intercorrelations

	PROBLEM-CHILD MOTHERS			NONPROBLEM-CHILD MOTHERS		
ACHENBACH	+	-	Tot.	+	-	Tot.
Schizoid	.044	-.200	-.044	.245	-.198	-.034
Depression	.126	-.169	.113	.377*	-.044	.007
Uncommunicative	-.119	-.009	.297*	.164	.118	-.296*
Obsessive-compul.	.199	-.535**	-.112	.207	-.219	.169
Somatic compl.	-.144	.143	.019	-.176	-.107	-.461**
Social withdr.	-.214	-.056	.308	-.229	.133	-.179
Hyperactive	.005	-.036	.189	.013	-.193	.029
Aggression	-.369*	.024	.005	-.049	-.079	-.140
Delinquent	-.042	-.096	.133	-.181	-.040	.073
Internaliz'g tot.	.050	-.251	.070	.214	-.078	-.250
Externaliz'g tot.	-.279	-.049	.145	-.257	.004	-.196
Total score	-.058	-.322*	.187	.051	.061	-.215
PARENTAL ATTITUDE SURVEY						
PROSOCIAL BEHAVIOR						
Internal-stable	.227	.046	-.384**	.198	.379**	-.056
Internal-unstable	.192	-.027	.250	-.004	-.426**	-.127
External-stable	.226	.379*	-.318*	-.258	-.144	.176
External-unstable	-.511**	.258	.327*	-.291	-.037	.169
ANTISOCIAL BEHAVIOR						
Internal-stable	-.290	.063	.062	-.359*	-.226	-.049
Internal-unstable	.349**	-.219	.001	-.109	.329*	-.049

External-stable	.538**	-.165	-.097	.132	-.466**	.114
External-unstable	.009	.102	.007	.263	.419**	.050
DISCIPLINE QUESTIONNAIRE						
Ignore	.... no score.....			-.095	.059	.033
Physical punish.	-.092	-.063	.216	-.076	-.109	.012
Verbal reprimand	-.097	-.107	.017	.300*	.171	-.149
Physical punish. + restrict priv.	-.094	.049	-.089	-.325*	.125	-.029
Verbal reprimand + restrict priv.	-.084	.317*	.178	.017	-.150	.087
No punishment	-.234	-.086	.111	.126	-.228	-.088
Approval	.014	-.113	.224	-.529	-.141	.221
Restrict priv.	.099	-.076	-.210	-.242	.001	.172
Permissive disc.	-.092	.041	.271	.028	-.265	.081
Authoritative	.209	-.284	-.106	.033	-.287	.181
Authoritarian	-.269	.292*	.056	.149	.072	-.156
BECK DEPRESSION INVENTORY						
	-.287	-.077	.268	-.069	-.257	-.143
CONTROLLABILITY	.003	.215	-.431**	.023	-.209	-.031
VIDEOTAPE DATA						
Prosocial behav.	1.00	-.479**	-.254	1.000	-.349*	-.047
Antisocial behav.	-.479**	1.00	.128	-.349*	1.000	.023
Total behavior	-.254	.128	1.000	-.047	.023	1.000

*p<.05

**p<.01

Table 12

Correlations of Achenbach Total

Scores with Other Measures

	PROBLEM-CHILD MOTHERS			NONPROBLEM-CHILD MOTHERS		
ACHENBACH	INT.	EXT.	TOT.	INT.	EXT.	TOT.
Schizoid	.465**	-.147	.198	.703**	.451**	.634**
Depression	.818**	.030	.689**	.647**	.106	.550**
Uncommunicative	.527**	-.002	.438**	.518**	.353*	.457**
Obsessive-compuls.	.609**	.078	.468**	.563**	.426**	.623**
Somatic complaint	.507**	-.345*	.138	.383**	.190	.186
Social withdrawal	-.035	.267	.365*	.386**	.604**	.636**
Hyperactive	.117	.423**	.229	.339*	.641**	.551**
Aggression	-.031	.743**	.528**	.433**	.815**	.741**
Delinquent	-.209	.819**	.399**	.157	.552**	.407**
Internal total	1.000	-.044	.679**	1.000	.541**	.864**
External total	-.044	1.000	.607**	.541**	1.000	-.806**
Total score	.679**	.607**	1.000	.864**	.860**	1.000
PARENTAL ATTITUDE SURVEY						
PROSOCIAL BEHAVIOR						
Internal-stable	-.294*	-.126	-.257	.224	-.106	.105
Internal-unstable	-.129	-.149	-.225	.167	.397**	.181
External-stable	.255	.002	.296*	-.177	-.109	-.124
External-unstable	.156	.220	.172	-.253	.041	-.093
ANTISOCIAL BEHAVIOR						
Internal-stable	.470**	.111	.290	-.316*	-.052	-.289

Internal-unstable	-.179	-.106	-.176	.101	.177	.149
External-stable	-.337*	-.182	-.265	-.018	-.060	-.081
External-unstable	-.433**	.001	-.212	.277	-.064	.281
DISCIPLINE QUESTIONNAIRE						
Ignore	....no score.....			.211	.322*	.314*
Physical punish't	-.164	.225	.089	.018	.029	-.032
Verbal reprimand	-.053	.039	.018	.227	.012	.295*
Physical punishment						
+ restrict priv.	.182	.015	.079	.258	.209	.186
Verbal reprimand						
+ restrict priv.	-.026	.092	.812	-.117	.129	-.119
No punishment	.329*	-.195	.151	-.440**	-.185	-.367*
Approval	.137	-.081	-.013	-.086	-.004	-.022
Restrict priv.	-.094	-.243	-.269	-.121	-.116	-.173
Permissive disc.	.035	-.012	.083	.313*	.131	.215
Authorit've disc.	.042	.232	.169	-.514**	-.259	-.528**
Authorit'ian disc	-.059	-.276	-.235	.361*	-.047	.166
BECK DEPRESSION INVENTORY						
	.203	.369*	.431**	-.011	-.009	-.165
CONTROLLABILITY	.037	-.127	-.133	-.125	-.139	-.079
VIDEOTAPE DATA						
Prosocial behav.	.051	-.279	-.058	.214	-.257	.051
Antisocial behav.	-.251	-.049	-.322*	-.078	.004	.061
Total behaviors	.069	.145	.187	-.250	-.196	-.215

**p<.01

*p<.05

Table 13

Correlations of Achenbach Subscales

With Other Measures

(Problem-Child Mothers)

ACHENBACH	S	D	U	OC	SC	SW	H	A	DEL
Schizoid	1.000	.315*	.009	.529**	.016	-.311*	.010	-.281	-.292*
Depress.	.315*	1.000	.441**	.371*	.297*	.056	-.029	-.012	-.069
Uncomm.	.009	.441**	1.0	-.185	.445**	.435**	-.078	-.049	-.039
Obsess-comp.	.529**	.371*	-.185	1.00	.048	-.256	.255	.109	-.110
Som-compl.	.016	.297*	.445**	.048	1.00	-.118	-.036	-.107	-.411**
Soc.withd.	-.311*	.056	.438**	-.256	-.118	1.00	-.286	.403**	.232
Hyperact.	.010	-.029	-.078	.255	-.036	-.286	1.000	.107	.188
Aggress.	-.281	-.019	-.049	.109	-.107	.403**	.107	1.000	.453**
Delinqu.	-.292*	-.069	-.039	-.110	-.411**	.232	.188	.453**	1.000
Internal'g	.465**	.818**	.527**	.609**	.507**	-.035	.117	-.031	-.209
External'g	-.147	.030	-.002	.078	-.345*	.267	.423**	.743**	.819**
Total	.198	.689**	.438**	.468**	.138	.365*	.229	.528**	.399**
PARENTAL ATTITUDE SURVEY									
PROSOCIAL BEHAVIOR									
IS	-.103	-.348*	.002	-.264	-.022	-.008	-.278	.059	-.029
IU	-.219	-.123	-.098	-.149	-.117	.054	.132	-.269	-.039
ES	.199	.303*	.022	.376*	.042	-.046	.102	.133	.253
EU	.110	.145	.052	.067	.103	.003	.050	.084	.231
ANTISOCIAL BEHAVIOR									
IS	.082	.341*	.148	.329*	.233	-.058	.244	.100	-.132

IU	.239	-.234	-.023	-.057	-.092	-.102	.197	-.317*	.003
ES	.004	-.113	-.228	-.271	-.284	-.149	-.184	-.206	.022
EU	-.225	-.341*	-.108	-.307*	-.151	.157	-.279	.101	.192
DISCIPLINE QUESTIONNAIRE									
Ignore	.....no score.....								
Phys.pun.	-.342*	-.122	.212	-.246	-.053	.379**	.043	.301*	.214
Verb.rep.	-.223	-.056	-.019	.019	.171	.055	-.038	.197	-.060
Phys.pun.+ rest.priv.	.215	.133	-.048	.145	.107	-.151	.124	-.099	.027
Verb.rep.+ rest.priv.	.212	.101	.067	-.111	.099	-.040	-.015	.068	.049
No punish.	.289	.448**	.108	.185	.223	-.160	-.142	-.195	-.210
Approval	.218	.011	-.123	.265	-.004	-.103	-.046	-.143	.019
Rest.priv.	-.119	-.122	-.086	-.043	-.285	-.008	-.068	-.274	-.189
Permiss.	.359*	.284	.119	-.079	-.139	.055	.014	-.249	-.094
Auth'ive	.011	-.094	.118	.068	.002	.002	.118	.206	.194
Auth'ian	-.119	-.010	-.112	-.080	.064	.047	-.133	-.189	-.209
BECK DEPRESSION INVENTORY									
	-.101	.161	.025	.128	.159	.287	.135	.412**	.323*
CONTROLLABILITY									
	.052	-.014	.051	-.078	.242	-.197	-.189	-.049	-.117
VIDEOTAPE DATA									
Prosocial	.044	.126	-.119	.199	-.144	-.214	.005	-.369*	-.042
Antisocial	-.200	-.169	-.009	-.535**	.143	-.056	-.036	.024	-.096
Total	-.044	.113	.297*	-.112	.019	.308*	.189	.005	.133

*p<.05

**p<.01

Table 14

Correlations of Achenbach Subscales

With Other Measures

(Nonproblem-Child Mothers)

ACHENBACH	S	D	U	OC	SC	SW	H	A	DEL
Schizoid	1.000	.534**	-.023	.758**	.070	.027	.401**	.427**	.178
Depress.	.534**	1.000	.032	.520**	-.148	.146	.345*	.219	-.056
Uncomm.	-.023	.032	1.000	-.083	.325*	.416**	-.076	.237	.175
Obs-comp.	.759**	.520**	-.083	1.000	-.031	.191	.559**	.588**	.197
Som.compl.	.070	-.148	.325*	-.031	1.000	.100	.023	.007	-.222
Soc.withd.	.027	.146	.416**	.191	.100	1.000	.285	.563**	.370*
Hyperact.	.401**	.345*	-.076	.559**	.023	.285	1.000	.682**	.181
Aggress.	.427**	.219	.236	.587**	.007	.563**	.682**	1.000	.534**
Delinq.	.178	-.057	.175	.197	-.222	.370**	.181	.534**	1.000
Intern'g	.703**	.647**	.518**	.563**	.383**	.386**	.339**	.433**	.157
Extern'g	.451**	.106	.353*	.426**	.190	.604**	.614**	.815**	.552**
Total	.634**	.550**	.457**	.623**	.186	.636**	.551**	.741**	.407**
PARENTAL ATTITUDE SURVEY									
PROSOCIAL BEHAVIOR									
IS	.031	.207	.175	-.009	.236	-.125	-.124	-.176	-.374*
IU	.382**	.039	.003	.129	-.001	-.046	.234	.359*	.400**
ES	-.241	-.210	-.100	-.052	-.051	.256	.106	-.046	.078
EU	-.158	-.192	-.148	-.054	-.345*	.163	-.049	.042	.253
ANTISOCIAL BEHAVIOR									
IS	-.139	-.242	-.431**	-.069	.026	-.142	.073	-.104	-.243

IU	-.235	-.206	.527**	-.209	.354*	.318*	-.131	-.019	-.169
ES	.121	.029	-.141	-.039	-.210	-.146	.006	-.120	.428**
EU	.231	.447**	.058	.271	-.278	.051	.001	.186	.094
DISCIPLINE QUESTIONNAIRE									
Ignore	.034	-.024	.112	.243	.213	.384**	.315*	.468**	.423**
Phys.pun.	-.131	-.036	-.017	-.103	.171	.123	.223	-.003	-.113
Verb.rep.	.244	.441**	-.094	.239	-.213	.034	.118	.083	-.087
Phys.pun+ res.priv.	.130	.004	.099	.036	.682**	.126	.091	.091	-.037
Verb.rep+ res.priv.	-.112	-.266	.313*	-.178	-.148	.056	-.111	-.024	.165
No pun.	-.157	-.297*	-.157	-.239	-.206	-.153	-.269	-.199	.151
Approv.	-.044	.009	-.145	-.015	-.136	-.043	.217	-.123	.157
Rest.priv	-.196	-.209	-.123	-.066	.091	-.024	-.043	-.140	-.239
Permiss.	.205	.413**	.022	.206	.049	.181	.459**	.124	-.041
Auth'ive	.379**	-.498**	-.095	-.390**	.027	-.364*	-.142	-.336*	-.124
Auth'ian	.213	.410**	.089	.096	.123	-.044	.085	-.218	-.413**
BECK DEPRESSION INVENTORY									
	.218	-.292*	-.017	-.208	.240	-.152	.049	-.179	-.133
CONTROLLABILITY									
	-.147	.159	-.013	-.103	-.202	-.042	-.041	-.088	.008
VIDEOTAPE DATA									
Prosocial	.245	.377*	.164	.207	-.176	-.229	.013	-.049	-.181
Antisocial	-.198	-.044	.118	-.219	-.107	.133	-.193	.079	-.040
Total	-.034	.007	-.296*	.169	-.461**	-.179	.029	-.140	.073

*p<.05

**p<.01

Table 15

Correlations of Parental Attitude Survey

With Other Measures

(Problem-Child Mothers)

	PROSOCIAL BEHAVIOR				ANTISOCIAL BEHAVIOR			
ACHENBACH	IS	IU	ES	EU	IS	IU	ES	EU
Schizoid	-.103	-.219	.199	.110	.082	.239	.004	-.225
Depress.	-.348*	-.123	.303*	.145	.341*	-.234	-.113	-.341*
Uncomm.	.002	-.098	.022	.052	.148	-.023	-.228	-.108
Obs-comp	-.264	-.149	.376*	.067	.329*	-.057	-.271	-.307*
Som.compl	-.022	-.117	.042	.103	.233	-.092	-.284	-.151
Soc.withd	-.008	.054	-.046	.003	-.058	-.102	-.149	.157
Hyperact.	-.278	.132	.102	.050	.244	.197	-.184	-.279
Aggress.	.059	-.269	.133	.084	.100	-.317*	-.206	.101
Delinq.	-.029	-.039	-.253	.231	-.132	.003	:022	.192
Intern'g	-.294	-.129	.255	.156	.470**	-.179	-.337*	-.433**
Extern'g	-.126	-.149	.002	.220	.111	-.106	-.182	.001
Total	-.257	-.225	.296*	.172	.290	-.176	-.265	-.212
PARENTAL ATTITUDE SURVEY								
PROSOCIAL BEHAVIOR								
IS	1.000	-.454**	-.047	-.409**	.589**	.358*	.320*	.474**
IU	-.454**	1.000	-.179	-.322	.185	-.081	.124	-.247
ES	-.047	-.179	1.000	-.543**	-.071	.127	.001	.021
EU	-.409**	-.322*	-.543**	1.000	.387**	-.319*	-.368*	-.206
ANTISOCIAL BEHAVIOR								

IS	-.589**	.185	-.071	.287**	1.000	-.679**	-.427**	-.886**
IU	.358*	-.081	.127	-.319*	-.679**	1.000	.181	.426**
ES	.320*	.124	.001	-.368*	-.427**	.181	1.000	.080
EU	.474**	-.247	.021	-.206	-.886**	.426**	.080	1.000
DISCIPLINE QUESTIONNAIRE								
Ignore	.....	.....	.....	no score	.....	.....	.....	.....
Phys.pun.	.131	.127	-.113	-.134	-.313*	.339*	-.112	.336*
Verb.rep.	.193	-.075	.038	-.095	-.079	-.173	.077	.132
Phys.pun.+ res.priv.	-.072	-.062	-.002	.106	.261	-.184	-.068	-.240
Verb.rep.+ res.priv.	.017	-.286	-.075	.269	-.232	.139	-.014	.290
No pun.	-.078	-.236	-.028	.272	.116	-.198	.047	-.103
Approv.	.033	.049	-.218	.096	-.052	.134	.049	-.014
Res.priv.	-.126	.254	.174	-.244	.174	-.086	-.009	-.215
Permiss.	-.244	-.093	.176	.134	-.058	.051	-.040	.074
Auth'ive	.161	-.067	.403**	-.373*	-.122	.189	.029	.109
Auth'ian	-.096	.092	-.439**	.325*	.141	-.159	-.131	-.104
BECK DEPRESSION INVENTORY								
	-.394**	.095	-.315*	.499**	.456**	-.347*	-.225	-.365*
CONTROLLABILITY								
	-.005	.014	-.084	.045	.301*	-.283	.065	-.339*
VIDEOTAPE DATA								
Prosocial	.227	.192	.226	-.511**	-.291	.349*	.538**	-.009
Antisocial	.046	-.027	-.379*	.258	.063	-.219	-.165	.102
Total	-.384**	.250	-.318*	.327*	.062	.001	-.097	.007

*p<.05

**p<.01

Table 16

Correlations of Parental Attitude Survey

With Other Measures

(Nonproblem-Child Mothers)

	PROSOCIAL BEHAVIOR				ANTISOCIAL BEHAVIOR			
ACHENBACH	IS	IU	ES	EU	IS	IU	ES	EU
Schizoid	.031	.382**	-.241	-.158	-.139	-.235	.121	.231
Depress.	.207	.039	-.201	-.192	-.242	-.206	.209	.447**
Uncomm.	.175	.003	-.100	-.148	-.431**	.527**	-.141	.058
Obs-comp.	-.009	.129	-.052	-.054	-.069	-.209	-.039	.271
Som.compl.	.236	-.001	-.051	-.345*	.026	.354*	-.210	-.278
Soc.withd.	-.125	-.046	.256	.163	-.142	.318*	-.146	.051
Hyperact.	-.124	.234	.106	-.049	.073	-.131	.006	.004
Aggress.	-.176	.359*	-.046	.042	-.104	-.019	-.120	.186
Delinq.	-.374*	.400**	.078	.253	-.242	-.169	.428**	.094
Intern'g	.224	.167	-.177	-.253	-.316*	.101	-.018	.277
Extern'g	-.106	.397**	-.109	.041	-.052	.177	-.060	-.064
Total	.105	.181	-.124	-.093	-.289	.149	-.081	.281
PARENTAL ATTITUDE SURVEY								
PROSOCIAL BEHAVIOR								
IS	1.000	-.560**	-.403**	-.716**	-.401**	-.542**	-.457**	.333*
IU	-.560**	1.000	-.130	.075	.278	-.443**	.342*	-.286
ES	-.403**	-.130	1.000	.115	.138	.014	.260	-.173
EU	-.716**	.075	.115	1.000	.279	-.394**	.236	-.087
ANTISOCIAL BEHAVIOR								

IS	-.401**	.278	.138	.279	1.000	-.277	-.250	-.617**
IU	.542**	-.443**	.014	-.394**	-.277	1.000	-.535**	-.170
ES	-.457**	.342*	.260	.236	-.250	-.535**	1.000	-.033
EU	.333*	-.286	-.173	-.087	-.617**	-.170	-.033	1.000
DISCIPLINE QUESTIONNAIRE								
Ignore	-.260	.046	.384**	.099	-.054	.055	.097	-.037
Phys.pun.	-.069	.065	.363*	-.038	-.024	.081	.284	-.221
Verb.rep.	.255	-.295*	-.004	-.102	-.254	.056	-.009	.386**
Phys.pun.+								
res.priv.	.176	-.001	-.141	-.184	-.197	.317*	-.173	-.060
Verb.rep.+								
res.priv.	-.133	.301*	-.125	.075	-.015	.023	.109	-.125
No pun.	-.529**	.298*	-.170	.402**	.197	-.298*	.268	-.388**
Approve	-.074	-.003	.252	-.075	-.139	-.174	.436**	-.021
Res.priv.	.179	-.303*	.200	-.017	.325*	.123	-.283	-.164
Permiss.	-.269	.219	.229	.048	-.078	-.286	.367*	.003
Auth'ive	-.056	.026	-.124	.096	-.034	-.031	.246	-.267
Auth'ian	.328*	-.157	-.078	-.309*	.123	.248	-.289	-.088
BECK DEPRESSION INVENTORY								
	-.224	.358*	.347*	-.199	.334*	.013	.059	-.407**
CONTROLLABILITY								
	-.180	.136	-.086	.177	.210	-.041	-.030	-.216
VIDEOTAPE DATA								
Prosocial	.198	-.004	-.258	-.291	-.359*	-.109	.132	.263
Antisocial	.379**	-.426**	-.144	-.037	-.226	.329*	-.466**	.419**
Total	-.056	-.127	.176	.169	-.049	-.049	.114	.050

*p<.05

**p<.01

Table 17

Correlations of Discipline Questionnaire

With Other Measures

(Problem-Child Mothers)

ACHENBACH	I	PP	VR	PP+ RP	VR+ RP	NP	A	RP
Schizoid no score		-.342*	-.223	.215	.212	.289	.218	-.119
Depress.	"	-.122	-.056	.133	.101	.448**	.011	-.122
Uncomm.	"	.212	-.019	-.048	.067	.108	-.123	-.086
Obs-comp.	"	-.246	.019	.145	-.111	.185	.265	-.043
Som.compl.	"	-.053	.171	.107	.099	.223	-.004	-.285
Soc.withd.	"	.379**	.055	-.151	-.040	-.160	-.103	-.008
Hyperact.	"	.043	-.038	.124	-.015	-.142	-.046	-.068
Aggress.	"	.031*	.197	-.099	.068	-.195	-.143	-.274
Delinq.	"	.214	-.060	.027	.049	-.202	.019	-.189
Intern'g	"	-.164	-.053	.182	-.026	.329*	.137	-.094
Extern'g	"	.225	.039	.015	.092	-.195	-.081	-.243
Total	"	.089	.018	.079	.082	.151	-.013	-.269
PARENTAL ATTITUDE SURVEY								
PROSOCIAL BEHAVIOR								
IS	"	.131	.193	-.072	.017	-.078	.033	-.126
IU	"	.127	-.075	-.062	-.286	-.237	.049	.254
ES	"	-.113	.038	-.002	-.075	-.028	-.218	.174
EU	"	-.134	-.095	.106	.269	.272	.096	-.244
ANTISOCIAL BEHAVIOR								

IS	"	-.313*	-.079	.261	-.232	.116	-.052	.174
IU	"	.339*	-.173	-.184	.139	-.198	.134	-.086
ES	"	-.112	.077	-.068	-.014	.047	.049	-.009
EU	"	.336*	.132	-.240	.290	-.103	-.014	-.215
DISCIPLINE QUESTIONNAIRE								
Ignore	.....no score.....							
Phys.pun.	"	1.000	.125	-.572**	.209	-.219	-.114	-.287
Verb.rep.	"	.125	1.000	-.184	-.084	-.013	.158	-.450**
Phys.pun.+ res.priv.	"	-.572**	-.184	1.000	-.255	.077	.192	-.031
Verb.rep.+ res.priv.	"	.207	-.084	-.255	1.000	.525**	-.039	-.640**
No pun.	"	-.219	-.013	.077	.525**	1.000	-.083	-.364*
Approve	"	-.114	.158	.192	-.039	-.083	1.000	-.247
Res.priv.	"	-.287	-.450**	-.031	-.640**	-.364*	-.247	1.000
Permiss.	"	-.125	-.143	.163	.534**	.548**	-.056	-.219
Auth'ive	"	-.056	-.185	.084	-.119	-.037	-.208	.181
Auth'ian	"	.117	.115	.036	-.096	-.133	.194	-.048
BECK DEPRESSION INVENTORY								
	"	.200	.009	.054	.008	.082	.001	-.278
CONTROLLABILITY								
	"	-.248	-.233	.293*	.017	-.015	-.136	.011
VIDEOTAPE DATA								
Prosocial	"	-.092	-.096	-.094	-.084	.234	.014	.099
Antisocial	"	-.063	-.107	.049	.317*	-.086	-.113	-.076
Total	"	.216	.017	-.089	.178	.111	.224	-.210

*p<.05

**p<.01

Table 18

Correlations of Discipline Questionnaire

With Other Measures

(Nonproblem-Child Mothers)

ACHENBACH	I	PP	VR	PP+ RP	VR+ RP	NP	A	RP
Schizoid	.034	-.131	.244	.130	-.112	-.157	-.044	-.196
Depress.	-.024	-.036	.441**	.004	-.266	-.297*	.009	-.209
Uncomm.	.112	-.017	-.094	.099	.313*	-.157	-.145	-.123
Obs-comp.	.243	-.108	.239	.036	-.178	-.239	-.015	-.066
Som.compl.	.213	.171	-.213	.682**	-.148	-.206	-.136	.091
Soc.withd.	.384**	.123	.034	.126	.055	-.153	-.043	-.024
Hyperact.	.315*	.223	.118	.091	-.111	-.269	.217	-.043
Aggress.	.468**	-.003	.083	.091	-.024	-.199	-.123	-.140
Delinq.	.423**	-.113	-.087	-.037	.165	.151	.157	-.239
Intern'g	.211	.018	.227	.258	-.117	-.414**	-.068	-.121
Extern'g	.322*	.029	.012	.209	.129	-.185	-.004	-.116
Total	.314*	-.032	.295*	.186	-.119	-.367*	-.022	-.173
PARENTAL ATTITUDE SURVEY								
PROSOCIAL BEHAVIOR								
IS	-.260	-.069	.255	.176	-.133	-.529**	-.074	.179
IU	.046	-.065	-.295*	-.001	.301*	.298*	-.003	-.303*
ES	.384**	.363*	-.004	-.141	-.125	-.170	.252	.200
EU	.099	-.038	-.102	-.184	.075	.402**	-.075	-.017
ANTISOCIAL BEHAVIOR								

IS	-.054	-.024	-.254	-.197	-.015	.197	-.139	.325*
IU	.055	.081	.056	.317*	.023	-.298*	-.174	.123
ES	.097	.284	-.009	-.173	.109	.268	.436**	-.283
EU	-.037	-.221	.386**	-.060	-.125	-.388**	-.021	-.164
DISCIPLINE QUESTIONNAIRE								
Ignore	1.000	.356*	.075	.205	-.197	-.136	-.062	-.133
Phys.pun.	.356*	1.000	-.031	.047	-.104	-.109	-.049	.065
Verb.rep.	.075	-.031	1.000	-.162	-.526**	-.258	-.049	-.385**
Phys.pun.+ res.priv.	.205	.047	-.162	1.000	-.277	-.153	-.114	-.059
Verb.rep.+ res.priv.	-.197	-.104	-.526**	-.277	1.000	.188	.039	-.121
No pun.	-.136	-.109	-.258	-.153	.188	1.000	.019	-.367*
Approve	-.062	-.049	-.049	-.114	.039	.019	1.000	-.098
Res.priv.	-.133	.065	-.385**	-.059	-.121	-.367*	-.098	1.000
Permiss.	.196	.288	-.161	.121	.112	-.110	.473**	-.094
Auth'ive	-.310*	-.011	-.439**	.054	.441**	.272	.138	-.028
Auth'ian	-.158	.042	.387**	.003	-.299*	-.156	-.205	.136
BECK DEPRESSION INVENTORY								
	.014	.145	-.261	-.039	.209	.091	.061	.036
CONTROLLABILITY								
	-.265	.077	-.066	-.122	-.122	.283	-.154	-.075
VIDEOTAPE DATA								
Prosocial	-.095	-.076	.301*	-.325*	.017	.126	-.053	-.242
Antisocial	.059	-.109	.171	.125	-.150	-.228	-.141	.001
Total	.033	.012	-.149	-.029	.087	-.088	.221	.172

*p<.05

**p<.01

Table 19

Correlations of Style of Discipline

With Other Measures

	PROBLEM-CHILD MOTHERS			NONPROBLEM-CHILD MOTHERS		
ACHENBACH	PERM.	AUTH'IVE	AUTH'IAN	PERM.	AUTH'IVE	AUTH'IAN
Schizoid	.359*	.011	-.119	.205	-.379**	.213
Depress.	.284	-.094	-.010	.413**	-.498**	.410**
Uncomm.	.119	.118	-.112	.022	-.095	.088
Obs-comp.	-.079	.069	-.080	.206	-.390**	.096
Som.compl.	-.139	.002	.064	.049	.027	.123
Soc.withd.	.055	.002	.047	.181	-.364*	-.044
Hyperact.	.014	.118	-.133	.459**	-.142	-.085
Aggress.	-.249	.206	-.189	.124	-.334*	-.218
Delinq.	-.094	.194	-.209	-.041	-.124	-.413**
Intern'g	.035	.042	-.059	.313*	-.514**	.361*
Extern'g	-.012	.234	-.276	.131	-.259	-.047
Total	.083	.169	-.235	.215	-.528**	.166
PARENTAL ATTITUDE SURVEY						
PROSOCIAL BEHAVIOR						
IS	-.244	.161	-.096	-.269	-.056	.328*
IU	-.093	-.067	.092	.219	.026	-.157
ES	.176	.403**	-.439**	.229	-.124	-.078
EU	.134	-.373*	-.325*	.048	.096	-.309*
ANTISOCIAL BEHAVIOR						
IS	-.058	-.122	.149	-.078	-.034	.123

IU	.051	.189	-.159	-.286	-.031	.248
ES	-.040	.029	-.131	.367*	.246	-.289
EU	.074	.109	-.104	.003	-.267	-.088
DISCIPLINE QUESTIONNAIRE						
Ignore	.....no score.....			.196	-.310*	-.158
Phys.pun.	-.125	-.056	.117	.288	-.011	.042
Verb.rep.	-.143	-.185	.115	-.161	-.439**	.387**
Phys.pun.+ res.priv.	.163	.084	.036	.121	.054	.003
Verb.rep.+ res.priv.	.534**	-.119	-.096	.112	.441**	-.299*
No pun.	.548**	-.037	-.133	-.110	.272	-.156
Approve	-.057	-.208	.194	.473**	.138	-.205
Res.priv	-.219	.181	-.048	-.094	-.028	.136
Permiss.	1.000	-.078	-.137	1.000	-.078	.031
Auth'ive	-.078	1.000	-.924**	-.078	1.000	-.615**
Auth'ian	-.137	-.924**	1.000	.031	-.615**	1.000
BECK DEPRESSION INVENTORY						
	-.088	-.125	.132	.171	.007	.115
CONTROLLABILITY						
	-.221	-.125	.197	-.096	.045	-.031
VIDEOTAPE DATA						
Prosocial	-.092	.209	-.269	.028	.033	.149
Antisocial	.041	-.284	.292*	-.265	-.287	.072
Total	.271	-.106	.056	.081	.181	-.156

*p<.05

**p<.01