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Family and Peer Relations of Conduct

Disorder and Hyperactive Children

Katy N. Morrison

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Family and Peer Relations of Conduct  
Disorder and Hyperactive Children

The purpose of this paper is to discuss the influence of the family and the peer systems on the development and maintenance of conduct disorder and hyperactivity. In the first section, the diagnostic criteria for children with conduct disorder and hyperactivity, the behavioral characteristics and prevalence of these disorders, as well as the controversy over differential diagnosis between these two disorders will be presented. Following this, the significant familial determinants of these two disorders will be discussed. Finally, the peer determinants of conduct disorder and hyperactivity will be presented.

Classification of Hyperactivity and Conduct Disorder

Criteria for hyperactivity.

In the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III) (American Psychiatric Association, 1980), the name hyperactivity was changed to attention deficit disorder with hyperactivity (ADHD) to emphasize the attentional deficit rather than the other symptoms of the syndrome. The three broad behaviors which the hyperactive child displays are inappropriate attention, impulsivity,

and hyperactivity.

According to DSM III (American Psychiatric Association, 1980), the following criteria for diagnosis of ADDH are:

- A) Inattention-manifested by at least three of the following:
- 1) often fails to finish things he or she starts
  - 2) often does not seem to listen
  - 3) easily distracted
  - 4) has difficulty concentrating on school work or other tasks requiring sustained attention
  - 5) has difficulty sticking to a play activity
- B) Impulsivity-manifested by at least three of the following:
- 1) often acts before thinking
  - 2) shifts excessively from one activity to another
  - 3) has difficulty organizing work
  - 4) needs alot of supervision
  - 5) frequently calls out in class
  - 6) has difficulty waiting turn in games of group situations
- C) Hyperactivity-manifested by at least two

of the following:

- 1) runs about or climbs on things excessively
- 2) has difficulty sitting still or fidgets excessively
- 3) has difficulty staying seated
- 4) moves about excessively during sleep
- 5) is always "on the go" or acts as if "driven by a motor"

D) Onset before 7 years

E) A duration of at least 6 months

F) Not due to schizophrenia, affective disorder, or mental retardation

Criteria for conduct disorder.

Conduct disorder has been classified in DSM III (American Psychiatric Association, 1980) into four categories: undersocialized aggressive, socialized aggressive, undersocialized nonaggressive, and socialized nonaggressive. The criteria for each dimension are as follows:

A general rule with any type of conduct disorder is a repetitive and persistent pattern of conduct in which the basic rights of others or major age-appropriate societal norms or rules are violated.

A) Aggressive-manifested by either:

- 1) physical violence against persons or property (e.g., vandalism, rape, breaking and entering, fire-setting, mugging, assault)
- 2) thefts outside the home involving confrontation with the victim (e.g., extortion, purse-snatching, armed robbery)

B) Nonaggressive-manifested by any of the following:

- 1) chronic violations of a variety of important rules within home or school (e.g., persistent truancy, substance abuse)
- 2) repeated running away overnight
- 3) persistent serious lying in and out of the home
- 4) stealing not involving confrontation with the victim

C) Socialized or Undersocialized-indicated

by at least two of the following for socialized and no more than one for undersocialized:

- 1) has one or more peer group friendships that have lasted for over six months
- 2) extends himself or herself for others even when no immediate advantage is likely
- 3) feels quilt or remorse when such a reaction

is appropriate

4) avoids blaming or informing on companions

5) shows concern for the welfare of friends

D) If 18 or older, does not meet the criteria  
for Antisocial Personality Disorder

Prevalence, sex differences, and behavioral  
characteristics.

Hyperactivity and aggression (i.e., conduct disorder) are two of the most frequent and pronounced childhood behavior disorders (Achenbach & Edelbrock, 1978). According to Roberts, Milich, Loney, and Caputo (1981), "Aggression, overactivity, and attention deficits are among the most commonly reported behavior problems in children referred to mental health clinics. Children exhibiting one or more of these behaviors may be diagnosed as having the hyperactive child syndrome, an attention disorder, an unsocialized aggressive reaction, or a conduct problem" (p. 371).

Hyperactivity is a condition which affects approximately 5% to 10% of elementary school children and up to half of those children referred to psychiatric clinics (Stewart, Pitts, Craig, Dieruf, 1966; Wender, 1971). Boys are affected much more often than girls with ratios from 5:1 to 9:1 reported (Weiss & Hetchman, 1979).

These children have been described as overactive, impulsive, inattentive, distractible, having poor frustration tolerance, and displaying temper tantrums. They may also exhibit aggression, anxiety, poor self-concept, and learning problems (Sandberg, Rutter, & Taylor, 1978). Poor peer relations, disinhibition, and lack of response to discipline have also been reported (Rutter & Garmezy, 1983).

Conduct disorder is another major externalizing behavior problem in childhood. Conduct problem children account for the majority of clinic referrals (Robinson, Eyberg, & Ross, 1980). Approximately one-third of all clinic referrals to mental health and child guidance centers are for childhood aggression (Patterson, 1964; Roach, Gurrslin, Hunt, 1958), and aggression is one of the most obvious behaviors of this disorder (Gelfand, Jensen, & Drew, 1982). As with hyperactivity, such externalizing behavior problems occur significantly more in boys than girls. The incidence of conduct disorder is from four to eight times greater in males than females (Schwarz, 1979). The prevalence of conduct disorder has been found to be from 4% (Rutter, Tizard, Yule, Graham, & Whitmore, 1976) to as high as 8% in some populations (Rutter, 1979; Rutter, Cox, Tupling, Berger, & Yule,



1975).

Behaviors frequently associated with conduct disorder include fighting, temper tantrums, destructiveness, and noncompliance (Fleishman, 1981). These children may also show poor moral development, poor social skills, and academic deficiencies (Gelfand et al., 1982).

In many of the studies to follow, aggression, which is one of the diagnostic criteria for both socialized and undersocialized aggressive conduct disorder, will be the term used to describe these children. When aggression refers to a sample of hyperactive children (as will become apparent in the peer data), this distinction will be made. One should also be keep in mind that not all of these samples of aggressive children would necessarily meet the DSM III criteria for conduct disorder, but because aggression is such a common behavior in these children, these studies are relevant and warrant discussion in this paper.

Differential diagnosis of conduct disorder and hyperactivity.

Although hyperactivity and conduct disorder have separate classifications (American Psychiatric Association, 1980), considerable overlap between

these disorders has raised doubts about the independence of these phenomena (Quay, 1977). In a review of multivariate classification studies of child psychopathology, Quay (1979) found, in most factor analytic studies, a single factor of both hyperactivity and aggression. Other studies, as well, argue against the existence of a separate hyperactivity factor, and have found that ratings of children on factor analytically derived conduct problem and hyperactivity scales are highly correlated. For example, Werry, Sprague, and Cohen (1975) found a .77 correlation between the hyperactivity and conduct disorder scales on the Conners Teacher Rating Scale (Conners, 1969) which is frequently used in research on child psychopathology and contains a wide range of school behavior problems.

The concept of a hyperkinetic syndrome has been challenged because many hyperkinetic children also exhibit aggressive and disobedient behaviors which are common to children with conduct disorder (Schachar, Rutter, & Smith, 1981). Also, many of the behaviors common to hyperactivity (e.g., short attention span, restlessness, overactivity) are found with other behavior problems such as conduct disorder and unsocialized aggressive reactions (O'Leary,

1980). Stewart, Cummings, Singer, and deBlois (1981), in a study of 175 clinic referred children, determined that 49% were diagnosed as hyperactive, 46% as unsocialized aggressive, and 34% had both disorders.

Others who question whether conduct disorder and hyperactivity can be differentiated have found many variables other than just the behavioral symptoms which are common to both disorders: male predominance, complications with pregnancy and prenatal morbidity, physical anomalies, attentional deficits, learning disorders, poor prognosis, and sociopathy and antisocial disorders in the parents (Sandberg, Rutter, & Taylor, 1978).

While many feel that the two disorders are highly correlated, there have been others who suggest the importance of separating hyperactivity and aggression in terms of predicting the clinical outcome of children with behavior disorders (Langhorne & Loney, 1979; Loney, Prinz, Mishalow, & Joad, 1978; Loney, Langhorne, & Paternite, 1978). There has also been a growing interest in the study of peer relations with these children, and it appears that important distinctions are being made between aggressive and hyperactive children in terms of peer social status (Milich & Landau, 1984; Milich, Landau, Kilby,

& Whitten, 1982). These distinctions will be presented later in the discussion of peer relations.

Because the behaviors associated with these two disorders are externally directed and undercontrolled (Gelfand, Jensen, & Drew, 1982), similarities do exist between these children. Certainly some conduct disordered children will exhibit behaviors common to the hyperactive child as will some hyperactive children manifest aggressive behaviors. But even with this overlap, the distinctions which are emerging from the peer relations data necessitate the separate classification of these children.

#### Familial Correlates of Conduct Disorder and Hyperactivity

Although it has been suggested that these two groups of children are distinguishable, the family data will be presented for these two disorders together. The reason for this is because many familial variables are common to both disorders. But before we can begin to distinguish these familial correlates, a brief discussion of the family as a socialization agency is required.

The family is one of the crucial environmental contexts in which the child interacts to develop his or her potentials. To a large extent the

development of the child's character, competence, and intelligence is determined by the influence of the caretakers (Baumrind, 1980).

Much of the research in parent-child relations has focused on parental attitudes and behaviors which influence the child. Parent personality, child-rearing practices and marital adjustment are all significant factors contributing to the child's social, cognitive, and emotional development. While there are significant relationships between these parent-child variables, one should keep in mind that the nature of this relationship is not unidirectional (i.e., parent's effects on the child) rather it is a bidirectional influence (Bell, 1968). Not only do parents influence their children but children also have an effect on their parents. Such constitutional differences as child's temperament should not be overlooked when investigating the relationship between parent-child interactions (Webster-Stratton & Eyberg, 1982). The family is a system of interacting individuals in which reciprocal influences do exist.

Several studies have examined the relationship between the family and conduct disorder and hyperactivity and have distinguished factors related

to these disorders. The following familial variables will be discussed: parental permissiveness, parental nonacceptance and rejection, lack of parental supervision and monitoring, parental commands and criticisms, schedules of consequents, coercion theory, the insular mother, parental adjustment and self-esteem, and marital discord. While the present report will discuss these factors separately, it is increasingly assumed that many child-rearing variables should be viewed as multivariate rather than single factors (Parke & Slaby, 1983).

#### Parental permissiveness.

Parental permissiveness, or as Sears, Maccoby, and Levin (1957) have defined, a parent's "willingness to have the child perform such acts [i.e., aggression]," has been associated with behavior problem children. Sears et al. (1957) found the highest percent of aggressive boys and girls in their study of child-rearing to be associated with both highly permissive and punitive mothers while the lowest percent of aggressive children were associated with mothers low in these two variables.

Aggressive children are frequently raised by parents who fail to impose direct control over their children's behavior (McCord, McCord, & Howard, 1961).

Permissiveness in combination with low acceptance, high punitiveness, and low use of reasoning is also associated with aggression (Baumrind, 1967). Becker (1959) found that a mother who was dictatorial and thwarting, with a father who failed to enforce regulations had conduct problem children (i.e., aggressive and uncontrollable).

Mothers who are submissive and ineffective in their use of control have children with more behavior problems. For example, Webster-Stratton and Eyberg (1982) observed 35 mother-child dyads and reported that mother submissiveness accounted for about 16% of the variance in child behavior problems. Olweus (1980) determined, as well, through path analysis (which is intended to represent a causal model of the relations among variables) that mother's permissiveness for aggression was a significant contributor to an aggressive reaction pattern in his two samples of Swedish boys 13 and 16 years old, respectively. It appears that failure to impose some limits on aggressive acting out behavior may lead to a freer expression of aggression in these children.

Parental rejection, nonacceptance, and negativism.

Behavior problem children frequently have parents

who are negative, rejecting, and nonaccepting (McCord, McCord, & Howard, 1961; Webster-Stratton & Eyberg, 1982; Winder & Rau, 1962). Olweus (1980) found that mother's negativism was directly related to boy's aggression. The mother's basic emotional attitude toward her son (i.e., her hostility or rejection and coldness or indifference) seems to be an important variable in the development of an aggressive reaction pattern. In a study of boys who fight at home, at school, or in both settings (cross-setting fighters), Loeber and Dishion (1984) found that the most deviant boys, the cross-setting fighters (who scored higher on several measures of antisocial behavior such as disobedience to parents, deviant peers, and delinquent lifestyle) were exposed to more parental rejection than either the nonfighters or the boys who only fight in one setting.

Parental rejection has been an important accompaniment to boys' aggression in school (Eron, 1982). In this study, Eron (1982) determined that parents who were less satisfied with their child's accomplishments and behaviors had more aggressive children. Lobitz and Johnson (1975) found that mothers of children with active behavior problems (i.e., aggressive, destructive, and hyperactive)



were more negative (unfriendly and disapproving) than nonreferral mothers. In a sample of fifth and sixth grade boys and girls, Armentrout (1971) determined that externalizing behaviors which included aggression, attention seeking, distractibility, restlessness, and temper tantrums, were inversely correlated with parental acceptance.

During a playroom task situation, Schulman, Shoemaker, and Moelis (1962) observed parents of conduct problem children to be significantly more hostile and rejecting toward their children than were parents of normal children. Jenkins (1966), as well, found that aggressive children's mothers were often openly hostile, and these children felt rejected by their mothers. This association seems to suggest that maternal hostility and rejection stimulate aggressive responses in the child.

Mothers of hyperactive children are often unaffectionate, disapproving, and negative toward their children (Battle & Lacey, 1972; Mash & Johnson, 1982). In both a structured-task and unstructured play situation (Mash & Johnston, 1982) these mothers were more negative and directive and less responsive toward their hyperactive children than were mothers of normal children. Parental rejection is not only

a source of frustration for the child, which may have an aggression producing effect, but nonacceptance also suggests a poor source of reinforcement so the parent is a poorer teacher of self-restraint (Martin, 1975).

Punitive and power-assertive discipline.

Harsh, punitive, power-assertive discipline has been associated with behavior problems in children (Sears et al., 1957; Becker, Peterson, Luria, Shoemaker, & Hellmer, 1962; Baumrind, 1967). McCord et al. (1961) found that aggressive boys were more likely than nonaggressive boys to be raised in a rejecting and punitive fashion (i.e., use of threats and parental attacks). They suggested that parental threats, rejection, and punitiveness are an attack on the child's sense of security and imply that the world is a dangerous place. These influences serve to arouse aggressive tendencies in the child. Social deviance in a sample of preadolescent boys was associated with punitive, restrictive, and ambivalent parents (Winder & Rau, 1962). Eron (1982) found that physical punishment by both parents was related to aggression in both boys and girls. Parent's aggression as measured by the sum of scales four and nine of the Minnesota Multiphasic Personality

Inventory (MMPI) was also related to son's aggression.

In the Fels Longitudinal Study (Battle & Lacey, 1972), mother's of hyperactive males, who were impulsive, uninhibited, and uncontrolled, were critical and severe with punishment. These mothers were disapproving and critical of their children at 3-6 years, and this criticism took the form of severe penalties for disobedience when the boys were 6-10 years old. Olweus (1980) also found that mothers' and fathers' use of power assertive methods, which included physical punishment as well as threats and violent outbursts, contributed to an aggressive reaction pattern in his two samples of boys. Punitive discipline seems to frustrate the child as well as provide a model of aggression.

Punishment, according to Sears et al. (1957), "While undoubtedly it often stops a particular form of aggression, at least momentarily, it appears to generate more hostility in the child and lead to further aggressive outbursts at some other time or place. Furthermore, when the parents punish-particularly when they employ physical punishment-they are providing a living example of the use of aggression at the very moment they are teaching the child not to be aggressive" (p. 266).

Lack of supervision and monitoring.

Both conduct disordered and hyperactive children are at risk for later problems with the law-behaviors associated with adolescent delinquents. Many of the problems associated with delinquent behavior (i.e., aggression, destructiveness, jealousy, and demands for attention) existed earlier as the problems of the conduct disorder and hyperactivity (Robins, 1979). One variable common to the families of delinquents is a lack of parental supervision and monitoring. In a review by Loeber (1982) who defined antisocial behavior as "acts that maximize a person's immediate personal gain through inflicting pain or loss on others" (p. 1432), he concluded that both lack of monitoring by parents as well as disruptions in disciplining are related to overt and covert antisocial acts.

Jenkins (1966) concluded from his study of both aggressive and inhibited children that the unsocialized delinquent group of aggressive children, who were characterized by behaviors such as furtive stealing, cooperative stealing, running away from home, habitual truancy from school, petty stealing and association with undesirable companions, was the product of a large uneducated family, received

little supervision, and lived in an unkempt irregular household. Patterson and Stouthamer-Loeber (1984) found significant correlations between delinquency and both lack of monitoring and inconsistent discipline. Boys who were defined as delinquent, based on juvenile court records and self-reported delinquency, were associated with parents who were unaware of their son's whereabouts, their companions, or their activities and were also inconsistent and ineffective in their use of punishment.

Loeber and Dishion (1984) hypothesized that their cross-setting fighters (boys who fight at home and at school) would score higher on antisocial and delinquent measures than either single-setting fighters or nonfighters. Forty-one percent of the fighters and only 16.9% of the nonfighters had been arrested. On a measure of self-reported delinquent lifestyle, the cross-setting fighters were the most deviant. An examination of family-management practices revealed that the cross-setting fighters were exposed to poorer supervision, monitoring, and discipline practices than the single setting fighters.

One final study (McCord, 1979) traced the criminal records of adult men whose family backgrounds had been recorded when these men were between 5 and

13 years old. It was found that lack of supervision during childhood was later related to both crimes against property and persons. Other variables that were related to later criminal behavior included: lack of maternal affection, mother's lack of self-confidence, deviant fathers, parental conflict and parent aggression, and father absence. It is evident from these studies that the problems associated with conduct disorder and hyperactivity are not limited to early childhood, and that many adolescent delinquents come from families in which lack of supervision and monitoring is prevalent.

Parental commands and criticism.

In the families of both conduct disordered and hyperactive children, parents are frequently more critical and give more commands to their children than do parents of normal children. In response to those commands conduct disordered and hyperactive children behave in a more negative and noncompliant manner than do normal children (Tallmadge & Barkley, 1983; Robinson & Eyberg, 1981). Through both direct observation and children's self-reports, it has been determined that clinic mothers (mothers of children referred because of behavior problems such as noncompliance, temper tantrums, and inappropriate

attention seeking) use higher rates of commands (i.e., orders, demands, directions) and criticisms (i.e., negative evaluations of the child or his activity) (Hazzard, Christensen, Margolin, 1983; Forehand, King, Peed, & Yoder, 1975).

Christensen, Phillips, Glasgow, and Johnson (1983) found that dysfunctions in parent-child interactions have been attributed to child's deviant conduct. Higher rates of parental negative behavior and parental commands as well as higher rates of child negative behavior and noncompliance were found in their sample of behavior problem children and their parents than in nonproblem families. When they investigated both antecedents and consequences, they concluded that "parent commands elicit child negative behavior and child negative behavior elicits parent negative behavior" (1983, p. 164).

Lobitz and Johnson (1975) also found that referral children were more deviant and less prosocial than nonreferral children, and that referral parents were more negative and controlling than nonreferral parents. What distinguished the parents of referral children was that they were negative and controlling to both deviant and nondeviant child behaviors. The fact that referral children received more negative

feedback and control for both deviant and nondeviant behavior, and that they engaged in more deviant behavior than the control subjects may be explained in terms of Patterson's coercion theory (Patterson, 1980) which will be explained in further detail later. In these referral families negative consequences may have an accelerating effect on child deviant behavior rather than a decelerating effect.

In one final study by Cunningham and Barkley (1979) in which hyperactive children and their mothers were observed interacting in both structured task and free play situations, it was found that these mothers gave almost twice as many commands and directions in both settings than did mothers of normal children. The hyperactive children were also significantly less compliant and cooperative to those commands than were normal children. The mothers of normal children used praise more contingently and rewarded negative behaviors less frequently than mothers of hyperactive children. The mothers of normal children were more likely to reward and strengthen appropriate behavior while the mothers of hyperactive children often ignored or responded negatively to appropriate activities. These authors concluded that this "reduction in positive responses



is likely to frustrate the child and increase his behavioral difficulties while simultaneously reducing the payoff and subsequent probability of more acceptable behavior" (1979, p. 223).

Schedules of consequents and responsivity to those consequents.

In families with deviant children or where marital conflict exists, there is often a high level of reinforcement for deviant behavior while prosocial behaviors are either ignored or are reinforced in a noncontingent manner (Snyder, 1977). Problem children receive more positive consequents for deviant behavior and are more frequently punished for prosocial behaviors than are nonproblem children.

Snyder (1977) investigated problem and nonproblem families to determine both the schedules of consequents provided for deviant and prosocial behaviors and the family members responsivity to those consequents. Problem families displayed more displeasing behavior than nonproblem families. Nonproblem families provided positive reinforcement for pleasing behavior and punished displeasing behavior while problem families had no contingencies—the consequent provided, whether positive, negative, or neutral, was independent of the behavior displayed. It was also observed

that punishment suppressed displeasing behavior in nonproblem families yet in problem families it accelerated displeasing behavior. Snyder (1977) suggested "that the family system is disrupted and that all family members contribute to the development and maintenance of deviant behavior" (p. 534).

#### Coercion theory.

According to Patterson (1980), "deficits in child management skills may lead to spiraling increases in coercive interactions among children and parents" (p. 1). Patterson's coercion theory is an explanation of how the family system serves to elicit, maintain, and increase the aversive episodes among the members of problem families.

Patterson (1980) assumes that the focal point lies within the mother's ability to manage the normal aversive episodes which occur in every family system. There are constitutional differences among both children and parents, and the rates of aversive events may be higher in families with marital conflict or active and irritable children. These constitutional differences lead to inept child management of normal aversive episodes.

The child who uses high rates of aversives may receive positive reinforcement for these behaviors

in the form of attention and interaction from parents. These positive consequences serve to maintain the negative child behaviors. Simultaneously, while positive reinforcement is in effect, negative reinforcement is also under way. A parent who makes a request of the child may withdraw it because in response, the child terminates his or her behavior. In this sequence the parent is negatively reinforced by the child's termination of aversive behavior, and the child is negatively reinforced by the removal of the request or command (i.e., an aversive event).

Both the mother and child tend to maximize the short term benefit as indicated in the diagram below (Patterson, 1980):

Negative Reinforcement Arrangement

Neutral Antecedent:	Time Frame 1	Time Frame 2	Time Frame 3
Behavior:	Mother ("clean your room")	Child (whine)	Mother (stops asking)

	Short Term Effect	Long Term Effect
Mother	The pain (child's Whine) stops	Mother will be more likely to give in when child whines
Child	The pain (mother's Nag) stops	Given a messy room, mother less likely to ask him to clean it up in the future
Overall	The room was not cleaned	Child more likely to use whine to turn off future requests to clean room

The mother requested that the child clean the room, and this request was followed by a whine which lead the mother to stop asking. In the short run both mother and child are satisfied because the aversive event is terminated. But in the long run the mother has increased the chances that the child will use whining in the future, and also she is more likely to give in to the child when he or she whines.

According to Patterson (1980), "these coercive events are serially dependent" (p. 4). It is through the process of reciprocity that given one coercive event another is likely to follow soon after. These extended coercive interactions begin to escalate in intensity. As Patterson (1980) has commented, "Within the coercive interchange, if one person escalates in intensity, the other is likely to follow suit" (p. 7).

Another component to Patterson's theory is that within these problem families, parents are ineffective in suppressing coercive child behaviors. When parents of problem children use punishment, these children frequently respond by continuing with or increasing their disruptive behavior. These aggressive children are not only unresponsive to punishment but also to positive reinforcers. The

outcome of these interactions is a disruptive family system in which one or more member is labelled deviant, there is lowered self-esteem, anger, disrupted communication and faulty problem-solving skills.

Patterson has emphasized that coercion is a process related to both the behaviors of the aggressive child and the mother who lacks self-esteem and parenting skills. If these unskilled mothers could be trained in effective family management skills, they may show improved self-esteem and feel less depressed and anxious.

In Patterson's sample of distressed families after training, mothers' of aggressive boys did show changes on their MMPI profiles. On three of the neurotic scales, Hypochondriasis (Hs), Depression (D), and Hysteria (Hy), there were reductions of borderline significance. Patterson (1980) hypothesizes that with these improvements in self-concept there should be reductions in aversive behaviors for all family members as well as improved parent perceptions of the child.

#### The insular mother.

Wahler (1980) has offered a process similar to Patterson's coercion theory as an interpretation for parent-child problems. In a group of treatment

referred mothers, Wahler (1980) identified two sets of mothers--those who benefit from parent training and those who show no improvements with their problem children. Unlike the successful mothers, the treatment failure mothers reported many interpersonal problems outside of the home. These mothers felt isolated from extra-family contacts, and of those contacts that they did have, they were limited and sometimes aversive. Wahler (1980) proposes that these aversive contacts with "kinfolk" and "helping agency representatives" serve to indirectly maintain parent-child problems in a process called "insularity."

Within this process the mother is coerced to change her child interaction patterns by these "other parties." The kinfolk or professional helper may approach her with a "manding action" which directs her to change certain behaviors. The mother may comply to these "mands" (or requests) but only when they are presented. These other parties are positively reinforced for her compliance, and she is negatively reinforced by the termination of the "mand" (which is aversive) when she complies. Unfortunately, the mother receives little reinforcement for compliance once the party has stopped manding, and the problems remain within the mother-child interaction.

What these mothers seem to be lacking according to Wahler (1980) are positive interactions with extra-familial contacts such as friends who are more rewarding and supportive. In conclusion Wahler (1980) comments, "The nature of that pattern [i.e., the pattern of extra-familial contacts] would argue that a shift from manding relationships to more friendship oriented contacts might have beneficial effects on her child rearing efforts" (p. 218).

#### Parental adjustment and self-esteem.

When considering the behavior problem child, another area of family functioning which deserves attention is the psychological adjustment of the parents. Not only do psychiatric problems occur more frequently in parents of clinic referred children than in the normal population, there is also a similarly high frequency of behavioral and emotional problems in the children of parents experiencing psychiatric problems (Griest & Wells, 1983).

Several studies have examined the relationship between parents' self-report scores on the MMPI and child behavior problems (Anderson, 1969; Johnson & Lobitz, 1974; Patterson, 1980; Eron, 1982). Anderson (1969) compared the MMPI scores of parents of aggressive, neurotic, and normal children. The

experimental aggressive parents scored higher than the other groups on the Hypochondriasis (Hy), Psychopathic Deviate (Pd), Psychothemia (Pt), Schizophrenia (Sc), and Hypomania (Ma) scales. Both mothers and fathers of externalizers scored higher on the Pd and Sc scales indicating difficulty with control over overt aggression and an inability to tolerate meaningful close relationships. The mothers also had low Mf (Masculinity Femininity) scales suggesting that their hostility is expressed through passive-aggressive behaviors.

In another study (Johnson & Lobitz, 1974) all of the fathers clinical MMPI scales were positively correlated with sons' deviance (i.e., aggressiveness, destructiveness, hyperactivity, temper tantrums) while only the mothers' Paranoia (Pa) scale was significantly related to child deviance. Johnson and Lobitz (1974) suggested that this pattern may reflect the greater importance of the father's emotional status in the prediction of the son's deviancy level. One implication of this study is that father variables may be more significant than mother variables when considering boys with conduct problems.

Eron (1982) found a similar relationship between both mother's and father's scale scores Pd and Ma



and son's aggression but not daughter's aggression. These two scales combined have been shown to be a reliable and valid measure of antisocial aggressive behavior (Eron, 1982). In yet another sample of clinic referred (behavior problem) and nonclinic children and their mothers (Griest, Forehand, Wells, & McMahon, 1980), clinic mothers perceived themselves as significantly more depressed and anxious than the nonclinic mothers. These mothers also perceived their children as significantly more maladjusted than did nonclinic mothers.

Patterson's coercion theory (1980) suggests that mothers of out-of-control children are inept at performing child management skills. As coercive interactions increase, it can be hypothesized that a mother's self-esteem will be lowered. These mothers often report bewilderment and an inability to cope as well as feeling more anxious and depressed than mothers of nonproblem children. In Patterson's (1980) clinic sample, mothers showed an elevation on all MMPI scales with the greatest elevation on D, Pa, Pt, Sc, and Si (Social Introversion).

It is evident that these mothers have a negative self-image, but as Patterson (1980) comments, it is difficult to determine whether the coercive

interchanges precede or follow the negative self-image without longitudinal data. Patterson (1980) suggests, "For the present, the most reasonable alternative is to assume that prolonged interactions with coercive family members will significantly exacerbate preexisting negative evaluations of self" (p. 36).

Studies have identified psychiatric disorder as well as lowered self-esteem in the parents of hyperactive children (Stewart, deBlois, & Cummings, 1979; Mash & Johnston, 1983a; Mash & Johnston, 1983b). In one study (Stewart et al., 1979) hyperactive boys were divided into those who were unsocialized aggressive and those who were not. Both antisocial personality and alcoholism were more common in the fathers of the aggressive boys than in the other fathers. There was also a trend for the mothers of aggressive boys to be neurotic more often than the other mothers. As these authors concluded, "The ways in which the psychiatric disorders of fathers and mothers influence the development of behavior problems in their sons have yet to be defined" (1979, p. 290). Possibly, antisocial fathers induce similar behaviors in their sons, there may be some genetic component, or depressed and neurotic mothers may be ineffective in their disciplining which results

in increased behavior problems.

Mash and Johnston (1983a) examined mother's and father's perceptions of child behavior, parenting self-esteem, and mother's reported stress within families of younger and older hyperactive and normal children. The parents of hyperactive children reported lower levels of parenting self-esteem and greater maternal stress than did normal parents. While parents of hyperactive children viewed themselves as less competent than normals with respect to both parenting skills and the value and comfort they derive from the parenting role, the parents of older hyperactive children were lower in their sense of competence related to skill and knowledge than were parents of younger hyperactive children. Mash and Johnston (1983a) commented that "these findings suggest a cumulative deficit in parenting self esteem related to unsuccessful child-rearing experiences" (p. 95). Mothers of hyperactive children also reported themselves as more stressed than mothers of normals on several dimensions. This stress was related to child characteristics, mother-child interaction, and to feelings of depression, social isolation, self-blame, role restriction, and lack of attachment.

The relationship between hyperactive children and maternal stress and self-esteem was further confirmed in an examination of sibling interactions during both mother absent play and mother present task situations (Mash & Johnston, 1983b). Sibling conflict was greater for hyperactive children than normal children. During play, negative behavior and independent play in the hyperactive-child/sibling interaction was related to maternal reports of low self-esteem. Independent play was also related to maternal reports of stress associated with both themselves and their children. During the supervised task situation, negative behavior in the hyperactive-child/sibling dyad was related to mother's reports of child related stress. These findings suggest the importance of sibling relationships in these families, and that parents should be taught to manage the behavior of the siblings as well as the hyperactive child.

While it is evident that a relationship between parent psychopathology and child behavior problems exists, the exact etiology of this interaction is not well defined. As Griest, Forehand, Wells, McMahon, (1980) have suggested, "Maladjusted mothers may exert a significant influence on the occurrence

of behavior problems in their children, the children's behavior may cause their mothers' maladjustment, or the etiology may be due to an unidentified third factor (e.g. life stresses)" (p. 500).

#### Family discord.

Another variable frequently associated with problems of conduct is family discord (Emery & O'Leary, 1982, 1984; Loeber & Dishion, 1984; Porter & O'Leary, 1980; Griest & Wells, 1983; Rutter, 1971; Emery, 1982; Christensen, Phillips, Glasgow, & Johnson, 1983). The evidence from these studies suggests that interparental conflict has been associated with child behavior problems whether the conflict arises in intact families, before a divorce or after a divorce (Emery, 1982). Whether the home is intact or broken, if there is interparental conflict, the child is at a greater risk than if the home is harmonious. Both the amount and type of marital conflict are important determinants of child behavior problems. Open hostile conflict is a better predictor of problems in children than is less open conflict (Emery, 1982).

Rutter's (1971) examination of parent-child separation revealed that separation experiences have an association with later development of antisocial

behavior in children, but that it is not the separation itself, rather it is the family discord and disturbance related to the separation that is important. Rutter (1971) states that "delinquency is mainly associated with breaks which follow parental discord rather than with the loss of a parent as such. Even within the group of homes broken by divorce or separation, it appears that it is the discord prior to separation rather than the break itself which was the main adverse influence" (p. 243).

Other factors related to parental discord and antisocial problems (Rutter, 1971) include the duration of the discord and the type of family disharmony. His findings revealed that the longer the tension and discord lasted, the more likely the child was to develop antisocial problems. When considering the type of family disharmony, two broad categories were distinguished: 1) active disturbance which referred to quarreling, hostility, and fighting and 2) lack of positive feelings in which relationships were cold and formal and there was little emotional involvement. Both lack of feelings and active discord were related to child deviant behavior. When the child was reported to have a good relationship with at least one parent, the harmful effects of marital

discord were somewhat reduced but not removed.

In Rutter's (1971) attempt to determine the relationship between discord and deviant child behavior, he offered this conclusion, "The effects are not entirely unidirectional and a circular process is probable but we may conclude that parental discord can start off a maladaptive process which leads to anti-social disorder in the children. This may fairly be regarded as a causal relationship" (p. 249).

When marital conflict was investigated in relation to boys reported to fight only in the home, only at school, or in both the home and school (cross-setting fighters), Loeber and Dishion (1984) found that the cross-setting fighters, who were the most deviant group, experienced the most marital conflict. A similar finding was reported for families referred for treatment having children with conduct disorders (Christensen et al., 1983). These investigators found a significant negative correlation between marital adjustment and child behavior problems, with marital maladjustment accounting for 25% of the variance in child behavior problems.

Two studies by Emery and O'Leary (1982, 1984) examined the relationship between marital discord and child behavior problems. In the earlier study

a sample of clinic children was investigated while in the later study a nonclinic sample was used. In the earlier study, as was predicted, there were significant correlations between ratings of marital discord and boys' behavior problems but not girls' behavior problems. This was true for both mothers' and childrens' perceptions of discord as well as for mothers' and fathers' ratings of behavior problems.

This sex difference between marital discord and behavior problems in boys but not girls has been reported by Rutter (1971) and Porter and O'Leary (1980). In an attempt to explain this sex difference Emery and O'Leary (1982) suggested a possible modeling hypothesis, "It is possible that fathers in an unhappy marriage are more aggressive and uncooperative than mothers and that boys imitate fathers more than girls imitate them" (p. 21).

In their later study (Emery & O'Leary, 1984) of a nonclinic sample only a modest correlation was found between marital discord and child behavior problems. Based on previous research these investigators proposed that the relationship between discord and behavior problems is stronger in samples in which 1) nonclinic children have an overrepresentation of current adjustment problems,



2) psychological disturbance is found with one or both parents, or 3) the children have been referred for treatment.

Another finding of interest in this report was that no sex difference was found. As an explanation these authors suggested that the stronger relationship between discord and boys' behavior problems than girls' behavior problems in clinic samples may be due to the fact that clinic referrals are more often for problems of undercontrol than overcontrol, and boys are more frequently associated with problems of undercontrol than are girls.

While all of these studies have determined an existing relationship between discord and behavior problems, one final study will be mentioned because it investigated a specific measure of discord-overt marital hostility (i.e., quarrels, sarcasm, physical abuse). Porter and O'Leary (1980) found significant correlations between overt marital hostility and many of the behavior problems of boys but, again, not of girls. Their explanation for these differential results suggested that while both boys and girls are exposed to equal amounts of marital conflict, girls may be better able to cope with this distress than boys—that maybe girls acquire the skills to

cope with these frustrations faster than boys.

It is evident that a relationship exists between discord and behavior problems, but the direction of this relationship is difficult to determine. A problem child may disrupt a marriage, a problem marriage may influence the child, or an interaction of both may be taking place. The research also suggests a stronger relationship between boys' behavior problems and discord than girls'. While some research has not substantiated this evidence, it appears that sampling selection may be responsible for these differences.

The family obviously has a significant impact on the development of the child. Many variables within the family system have been associated with conduct problem and hyperactive children. Factors related to child-rearing practices, parenting skills, parent-child interactions, as well as marital and parental adjustment have all been discussed. The data suggest that these families are evidencing problems in many areas of functioning, and that this dysfunction can contribute to the development and maintenance of conduct disorder and hyperactivity. The emphasis will now be shifted from the family to the peer system.

## Peer Relations of Conduct Disordered and Hyperactive Children

Socialization within the peer system is a unique yet significant contributor to the child's development. According to Hartup (1979), "early experience with age-mates constitutes a unique base for learning affective controls and social skills" (p. 947). There has been increasing attention directed to the importance of peer relations in determining both short-term and long-term development of the child (Milich & Landau, 1982). It has been suggested that not only is peer popularity an important predictor of successful adjustment later in life, but poor peer relations have consistently been predictive of later difficulties in several areas of functioning including school performance, work history, law involvement, and psychiatric hospitalizations (Milich & Landau, 1982). Peer relations have turned out to be a more powerful predictor of later functioning than either teacher or parent reports (Cowen, Pederson, Babigian, Izzo, & Trost, 1973).

If successful peer relations are such an important predictor of a child's later adjustment, it seems that a special interest should be directed to those populations that are at risk for poor peer relations.

Both conduct disordered and hyperactive children represent two such populations.

Behaviors associated with conduct disorder and hyperactivity such as off task, disruptive, impulsive, inattentive, immature and inappropriate behaviors as well as aggressive behaviors have all been correlated with peer rejection (Milich & Landau, 1982; Eron, 1982; La Greca, 1981). In a pilot study by Campbell and Paulauskas (1979) in which normal children's perceptions of friendship and deviance were obtained through interviews, 69% of their subjects associated externalizing behaviors with those children described as rejected. As these authors commented, "Most commonly mentioned were lack of attention in school, disruptive and disturbing behavior in the classroom and at recess, and aggressive behavior" (1978, p. 240).

#### Aggression and social status.

Aggression is a behavior frequently associated with conduct disorder. It is also apparent in many children described as hyperactive (Battle & Lacey, 1972; Gelfand, Jensen, Drew, 1982). However, the relationship between aggression and social status is somewhat ambiguous. In a study of the correspondence between teacher ratings of peer interactions and

peer ratings of social status in an elementary school sample, La Greca (1981) determined that both withdrawn and aggressive behaviors contributed to a male's low peer status, but for females, withdrawn behaviors were more predictive of peer acceptance problems.

In the longitudinal work of Eron (1982) concerning factors related to aggression in childhood, peer popularity was negatively related to aggression in both boys and girls, with the more aggressive children nominated as the more unpopular. Dodge, Coie, and Braake (1982) examined the sociometric status of two sets of boys and found that rejected children were significantly more aggressive toward their peers than were either average or popular children. Although these rejected children made more social approaches toward their peers in the classroom than did other children, these approaches were rejected by their peers significantly more than were those of other children. Rejected children were also found to engage in more task-inappropriate solitary activity than either average or popular children—a behavior which may contribute to their low status.

Olweus (1977), on the other hand, found no correlation between aggression and unpopularity

in his two samples of 13 year old boys. Instead, unpopularity was associated with children rated by their peers as the victims of aggression. Green, Beck, Forehand, and Vosk (1980) did find that children nominated by teachers as either conduct problem or withdrawn were rejected more and accepted less by peers than was a normal control group.

#### Hyperactivity and social status.

Hyperactive children, as well, are reported to have poorer social status than their peers. On a 35-item Peer Interaction Checklist, teachers rated hyperactive children as having significantly more peer problems than their matched controls. While this was evident for two age groups (6-8 years and 9-11 years), the older hyperactives had more difficulties with their peers than the younger hyperactives (Paulauskas & Campbell, 1979). In the Fels Longitudinal Study (Battle & Lacey, 1972) male and female hyperactive children were observed at home, in school, and in a day camp. Both males and females were physically bold and socially aggressive with their peers. While social attack resulted in peer acceptance for females, in males it resulted in rejection by other children.

Klein and Young (1979) observed both teacher

nominated hyperactive and normal active boys in the classroom. Through a sociometric measure, Class Play (Bower, 1969), in which children assign one another to positive or negative roles in a hypothetical play, it was determined that hyperactive boys were perceived more negatively by peers than normal active boys. Hyperactive boys were nominated for a higher percentage of negative roles, and were chosen less often for the role of a "true friend" than were normal active boys.

A similar approach was used by King and Young (1981) to assess peer relations among hyperactive and normal active boys. Two sociometric devices were completed—Class Play and a like-dislike nomination (Peery, 1979). Not only were hyperactive boys preferred less than the normal active boys (they received more negative role nominations and fewer positive roles in Class Play), they also had fewer reciprocal peer friendships than normal active boys. The severity of the behavior (i.e., hyperactive vs normal active) appears to be related to the negative perceptions of these children.

Pelham and Bender (1982) began a treatment program for hyperactive children, and it became evident that despite improvements in parent-child

interactions and on task behaviors in the classroom, these children were still having peer problems. It was with this discovery that these researchers became interested in the study of peer relations with this population. They began a series of investigations which will be summarized below.

Initially, Pelham and Bender (1982) administered simple sociograms to the classmates of their small sample of treated children. Six out of 7 of these hyperactive children averaged two standard deviations above the class means in negative nominations. This research was then extended to a sample of 42 hyperactive children (5-10 years old) entering their program for treatment. Sociograms were administered prior to treatment and results indicated that 96% of the hyperactive children received negative nominations above the class means, and 74% received positive nominations below the class means. These children were apparently disliked by their peers.

To obtain more descriptive sociometric data within a school setting (Pelham & Bender, 1982), first through sixth graders completed a 35-item peer nomination inventory, The Pupil Evaluation Inventory (PEI), which has distinguished factors labelled "Aggression," "Withdrawal," and "Likeability."



Out of 587 children, teachers identified 52 boys and 12 girls with ADDH based on DSM III guidelines. When hyperactive children were compared to their nonhyperactive classmates, significant differences on all three factors (Aggression, Likeability, Withdrawal) were obtained. Hyperactive children were nominated by peers more frequently than their nonhyperactive classmates for behaviors related to negative peer interactions as well as for behaviors that would be disrupting to the teacher.

Due to the heterogeneity of the diagnostic category of hyperactivity, these authors decided to compare subgroups of hyperactive children based on whether the child exhibited aggression as well. Four groups were identified: High Hyperactive and High Aggression (HH-HA), Low Hyperactive and High Aggression (LH-HA), High Hyperactive and Low Aggression (HH-LA), and Low Hyperactive and High Aggression (LH-HA). While clear differences were found in peer relationship patterns for these groups, it appeared that both high hyperactivity and high aggression resulted in peer dislike. As these authors concluded, "Apparently aggressive behavior in hyperactive children contributed in a major way to peer unpopularity through obvious pathways, but

extreme hyperactive behavior in children also resulted in unpopularity" (1982, p. 391).

The next step in their research (Pelham & Bender, 1982) was to go beyond peer and teacher ratings to observations of hyperactive and nonhyperactive children in a nonclassroom setting. Both hyperactive and nonhyperactive children were observed interacting in small playgroups (1 hyperactive and 4 nonhyperactive) during both structured and unstructured periods. Hyperactive children showed from two to 10 times as much negative behavior as their nonhyperactive peers, and were rated as significantly more negatively on a sociogram than their peers. Hyperactive children were involved in many negative interpersonal behaviors which resulted in extreme dislike from their peers after a very short time period (two brief sessions). Hyperactive children exhibited high rates of both verbal and physical aggression as well as high rates of interruptions, verbal initiations, talking, etc. From this data it is not clear whether the aggression or these annoying behaviors were the reason for the dislike.

From all of their studies Pelham and Bender (1982) concluded, "A bossy, aggressive, and bothersome interpersonal style apparently characterizes the

interpersonal interactions of hyperactive children across situations, and this style results in extreme ratings of dislike from peers" (p. 401). It is apparent that both hyperactive and aggressive children are disliked but for different reasons.

Distinctions between hyperactive, aggressive, and hyperactive-aggressive children.

Other researchers, as well, have been interested in distinguishing between the social status of hyperactive and aggressive youngsters (Milich, Landau, Kilby, & Whitten, 1982; Milich & Landau, 1984). Milich et al. (1982) collected both teacher ratings and peer nominations of a sample of preschool boys to determine whether hyperactivity and aggression exhibited differential relationships with peer popularity and rejection. They found that peer nominated aggression was significantly related to rejection, but that peer nominated hyperactivity was related to both rejection and popularity. An examination of the data suggested that overactivity may be positively viewed by the preschool population. In the preschool setting where the situational demands are quite different from those in an elementary school setting, overactivity is probably less disruptive and aversive.

In a later study Milich and Landau (1984) identified children as aggressive, aggressive/withdrawn, and withdrawn. Both the aggressive and aggressive/withdrawn youngsters were rejected by their peers, but the aggressive boys also received high popularity scores. Based on teacher ratings, it was apparent that both the aggressive and aggressive/withdrawn groups were rated high on aggression, but the aggressive/withdrawn group also received high hyperactivity ratings.

From the observational data it appeared that the aggressive/withdrawn boys were involved in only negative interactions while the aggressive boys engaged in both positive and negative interactions with their peers. This may help to explain why the aggressive youngsters were both popular and rejected, and the aggressive/withdrawn boys were rejected and unpopular. Based on their social status, the aggressive/withdrawn group was the most vulnerable for later problems.

Milich and Landau (1984) point out the importance of distinguishing between these different groups of aggressive youngsters in order to obtain more valid information concerning the relationship between aggression and social status.

Both hyperactive and aggressive (i.e., conduct disorder) children experience difficulties interacting with their peers. While the data concerning hyperactive children's peer relations strongly support a relationship with poor social status, the results for aggressive children are somewhat ambiguous. Researchers suggest that when investigating the relationship between social status and aggression, it is important to define the type of aggression under study (Milich & Landau, 1982) because some forms of aggression may be positively viewed by peers while others may be negatively viewed. What is apparent from this sociometric data is that subtle differences exist between hyperactive children, aggressive children, and children who are both hyperactive and aggressive. Only with further research can we begin to clarify the distinctions between these children.

### Conclusion

It is evident that hyperactive and conduct disordered children come from families experiencing dysfunction. Whether it be problems in child-rearing practices, communication patterns, parental or marital adjustment, the data support a relationship between these factors and conduct disordered and hyperactive

children. It is also apparent that these children are having peer relations problems. Although the results from the sociometric data are somewhat ambiguous, their overall social status is rather poor. With a few exceptions most of these children, whether they are hyperactive, conduct disordered, or of an overlapping nature, are disliked by their peers for various reasons.

Much of the research to date has focused on either the family or peer system, individually. While these studies have provided valuable information regarding their influence on hyperactive and conduct disordered children, an obvious next step will be to examine the family and peer systems, jointly. Some significant connections between these two systems and their impact on the conduct disordered and hyperactive child should become apparent through an investigation of both.

It will also be necessary to begin a longitudinal assessment of these children, their families, and their peer groups so that we can identify significant developmental changes as well as make causal inferences about these relationships.

Not only will this research require more specific definitions of these children's behaviors (i.e.,

aggression), there will also be a need to distinguish between aggressive, hyperactive, and aggressive-hyperactive children in order to clarify some of the equivocal sociometric data. Only through careful definitions, distinctions, and replications, can we contribute to the existing research on these children, their families, and their peers.

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