

A SURVEY TO IDENTIFY SIGNIFICANT FACTORS IN THE STRUCTURE
AND ENVIRONMENT IN FAMILIES OF HYPERACTIVE CHILDREN

A THESIS
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DEDICATION

To my husband, Charlie, for his
patience, understanding, and love;

To my daughter, Ashleigh, for the
meaning she brings to my life.

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CHAPTER 1

INTRODUCTION

The study of hyperactive children has been the focus of attention and interest in recent years. Many behavioral traits have been ascribed to the hyperactive syndrome first appearing in literature approximately 100 years ago. However, in spite of an increasing awareness of the general behavioral traits characteristic of many hyperactive children there continues to be confusion regarding the definition and etiology of the syndrome.

Many behaviors characteristic of hyperactivity such as high activity, restlessness, and distractibility occur normally in the phase-related growth and development of the infant and young preschool child. Occasionally, when older children are tired or in stressful situations their emotional tension may be released in brief periods of hyperactive behavior.

Hyperactivity becomes a cause of concern when it occurs frequently in situations in which it is clearly inappropriate, when the child is unable to inhibit the activity or when it is accompanied by related behavioral or physiological symptoms. If these behaviors persist or remain at a constant level of inappropriateness, they may cause

additional pressure and anxiety in the family, thus influencing an increase in the child's activity level. At birth and during the early years a child is impressionable. The role of the child is patterned by the parents whether or not the parents are aware of their influence. A child brings little predetermined behavior into the world with him. Because of this, he is dependent on his parents to meet his primary growth and developmental requirements and to establish an atmosphere of security.

This study was an approach to analyze determining factors which differentiated families whose children are diagnosed as hyperkinetic from families with nonhyperkinetic children.

Statement of Problem

Clinical observations have suggested that commonalities exist in families of hyperactive children. The relationship between sociological and psychosocial development in the family and hyperkinetic behavior of the child was ill-defined. Psychologists and sociologists have postulated that factors exist in this relationship; however, there were minimal data to establish this correlation. Due to an increase in the number of children identified as exhibiting hyperkinetic behavior, documentation of these factors would

give direction to more effective intervention and prevention.

Purposes

The purposes of this study were to:

1. Identify organizational and interrelational factors common to families who have children with hyperactive child syndrome.
2. Determine if these factors were different in home environments where there were no children with hyperactive child syndrome.

Significance

The significance of this study was to provide information about the interaction of hyperkinetic and non-hyperkinetic children with their environmental systems, both sociological and psychological. Such information was provided for professionals and parents to facilitate a greater understanding of hyperkinetic children and to assist in the intervention and treatment of hyperkinetic behaviors.

Hypotheses

The hypotheses advanced for this study stated that:

1. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with

hyperactive child syndrome in the area of family structure and environment.

2. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of interpersonal relationships within the family.
3. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child discipline.
4. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child management.
5. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child responsibility.
6. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with

hyperactive child syndrome in the area of child independence.

Definitions of Terms

For this study, the following definitions of terms were used.

1. Environment: In this study, the objective empirical data regarding the conditions which surrounded the family and the child.
2. Family: The unit of related persons generally involving parents and children but could involve grandparents, aunts and uncles living within the same residence.
3. Hyperactivity or hyperkinesis: The persistent, excessive and intense level of motor activity situationally and socially inappropriate to age.

Limitations

The following limitations were recognized:

1. Geographical considerations.
2. Influence of selection procedures on representation and sample size.
3. Memory, perception and candor of reporting parents.

Delimitation

The following delimitation was recognized for this study:

1. Limited to parents/families of hyperactive children between the ages of 4 and 10 years, residing in southeast Texas, who had been identified as hyperactive by a physician and/or clinical psychologist.

Assumptions

The following assumptions guided the study:

1. Physicians and/or clinical psychologists accurately and consistently identified hyperactive child syndrome.
2. Convenience samples reasonably reflected characteristics of the population in an urban southeast area of the United States.

Summary

Hyperkinetic behavior in children has long been an issue of popular concern. Due to an increased interest in this area it is advantageous to learn more about the organizational and interrelational factors common to those families with hyperkinetic children as compared to families with nonhyperkinetic children.

Chapter 1 has included the problem, purposes, significance, hypotheses, definitions of terms, limitations, delimitations and assumptions of this study. Chapter 2 will establish the theoretical basis.

CHAPTER 2

REVIEW OF LITERATURE

An English pediatrician in 1902 first recognized and described the hyperactive child (Still, 1902). Such descriptions have continued to the present time.

Although many behavioral traits have been ascribed to the hyperactive child syndrome, a definition of this condition would likely refer to behaviors such as restlessness, impulsivity, distractibility, attentional deficiency, and a tendency to seek stimulus (Ament, 1974; Cohen & Douglas, 1972; Minde, Webb, & Sykes, 1968). In spite of an increasing recognition of the general behavioral traits characteristic of many hyperactive children there was confusion regarding the definition and etiology of the disorder.

The first descriptions of the hyperactive child syndrome were of neurological disease (Edbaugh, 1923; Still, 1902; Strauss & Lehtinen, 1947). The tendency to equate hyperactivity with brain damage or brain dysfunction persisted. As a result, many clinicians referred to hyperactivity as the "minimal brain damage syndrome" and assumed it was the result of brain damage (Strauss & Lehtinen, 1947). It became clear that only a minority of these restless, impulsive and inattentive children had

a definite history of brain trauma (Morrison & Stewart, 1973a). It has been argued that there was no clear causal relationship between brain damage and hyperactivity (Pond, 1961). It was equally important to stress that many hyperactive children present no evidence of structural cerebral damage when subjected to electroencephalographic or other related procedures (Knobel, Wolman & Mason, 1959).

Many hyperactive children today were presumed to have, by definition, a learning disability. Evidence was beginning to emerge that classification of hyperactive children according to the presence or absence of signs of brain dysfunction and/or learning disabilities was important in selecting effective treatment (Ferguson & Trites, 1978).

Hyperactivity was perhaps the most frequent cause for referral of children to clinics, special services in schools, and other professional resources (Trites, 1979). Estimates of the prevalence of the hyperactive syndrome in children vary considerably ranging from 1% to 15% (Schrag & Divoky, 1975). It was estimated that four to five million, or 3% to 6%, of all school age children in the United States have mild to uncontrollable hyperkinetic behavior (Feighner, 1974). It was statistically more prevalent in the male population, occurring on a ratio of two females to 10 males (Feingold, 1975).

Genetic Factors

There was increasing evidence that hyperactivity in children was a final common pathway for a variety of reasons: genetic, organic, psychogenic, and nonsocial environmental factors (Ross & Ross, 1976). Many attempts have been made during the past several years to evaluate the roles of genetic and environmental factors in hyperkinetic behavior. Although no studies have directly established that genetic factors are important determinants of hyperactivity, well-documented findings suggested that such relationships existed. Evidence has suggested that animals can be selectively bred for high or low activity level (McLearn, 1970). Human twin studies have suggested a genetic component to activity level (Scarr, 1966). Many parents remember themselves as hyperactive (Stewart & Olds, 1973). In addition, a significant parent-child resemblance in activity level existed when parents of children within the normal range of activity level were asked to report on their own childhood activity levels (Willerman & Plomin, 1973).

It has been suggested by several investigations that the hyperactive behavior pattern might be a childhood prologue to psychiatric disorders in adulthood. Morrison and Minkoff (1975) have presented three case reports suggesting

that an explosive personality in adulthood may be one of the sequelae of hyperactivity in childhood. Morrison and Stewart (1971) interviewed the parents of 59 hyperactive and 41 control children and found a significantly higher prevalence of psychiatric illness, particularly alcoholism, in the parents of hyperactive children. In 21 of the 59 families of hyperactive children, at least one parent was alcoholic, hysteric or sociopathic compared to only 4 of 41 control families. Twelve parents of hyperactive children (9 males, 3 females) were diagnosed as having been hyperactive as children compared to two parents of control children; and of these 14 parents, 11 qualified for a psychiatric diagnosis. These data indicate the association of hyperactivity in children with specific psychiatric disorders in their parents, and suggest that hyperactivity may be etiologically related to alcoholism, hysteria, and sociopathy.

The finding of a higher prevalence of psychiatric disorder in parents of hyperactive children has been confirmed by Cantwell (1972). Hysteria was predominantly found in the mothers of hyperactive children while alcoholism and sociopathy were found in the fathers. Cantwell found that 10 of the 100 parents of the children in his study had been hyperactive as children, and all of these 10 parents were

psychiatrically ill. This implies that hyperactivity may be a precursor to alcoholism, sociopathy and hysteria in adulthood.

Cantwell (1972) also suggested that a hyperactive child is at "risk" for the development of psychopathology if he grows up in a family where one or more members are psychiatrically ill. There was no conclusive data to explain whether possible mechanisms of transmission of the hyperactive syndrome are genetic or environmental. Morrison and Stewart (1973a) found that parents of hyperactive children frequently had relatives who were hyperactive as children and who later became alcoholic adults. The distribution of these conditions was significantly high in the families of hyperactive children, supporting a polygenic mode of inheritance.

Morrison and Stewart (1973b) have shown that legal parents of adopted hyperactive children were less likely to be psychologically ill than were biological parents with hysteria and sociopathy not appearing at all in the group of legal parents. A second child exhibiting hyperactive child syndrome in the adopted families was rare. This evidence was interpreted as favoring the hypothesis that the hyperactive child syndrome and adult personality disorder have genetic components in common. These studies

suggested the existence of a hereditary factor in the transmission of hyperactivity that operates in combination with environmental factors.

Environmental Factors

Anastasia (1958) concurred by noting that the development of the child is dependent upon his environment, a combination of physical, social and cultural conditions. Within the last four decades children in different cultural and economic surroundings have been observed and examined. From data relating to their development, certain strengths and deficits of different types of environments have been identified. Findings of Wortis (1963), Pavenstadt (1965), Klaus and Gray (1968), and Caldwell (1967) suggested that severe disarrangement of the environment or a significant reduction in opportunities for interacting with the environment has adverse effects on the development of the young child. Environmental stimulation and personal interactions of early childhood years are being viewed more and more as having a vital influence on the child's development and his ability to learn. A study by Edwards (1965) indicated the high incidence of children who do not perform well in school may be due partially to stimulation deficits early in the child's life. Subsequent studies by Woolman (1965) and Bloom (1964) found that the majority of individuals go

through the early years of life within a familiar culture which provides the first learning as well as the transitional matrix for learning. This learning period, particularly during infancy and preschool years, is viewed as being most crucial for later learning.

A review of literature by Ausubel and Sullivan (1970) revealed that lack of adequate stimulation during the early years retards intellectual development. They found that regardless of the individual genetic potentials, cognitive development occurs largely in response to a variable range of stimulation requiring incorporation, accommodation, adjustment and reconciliation. They concluded that the more variable the environment to which individuals are exposed the higher is the resulting level of effective stimulation.

Thompson (1960) stated in his review of literature regarding early experience that an environment lacking variety in material surroundings, and in which there is minimal opportunity for interaction with mother, is going to be deficient in learning opportunities. It has been suggested by Casler (1960) that, after six months of age, perceptual deprivation and inadequate mother-child interaction have a profound effect with resultant poor development of children.

One explanation of the etiology of hyperactivity centers around the traditional view that the mother's

behavior with her child is primarily a function of her attitudes, motives, and philosophy of child rearing. It has been suggested that there are children who are predisposed to hyperactivity because of constitutional factors, and who then react with hyperactivity when they are stressed with environmental pressures that exceed their tolerance (Bettelheim, 1973). According to this stress formulation, many potentially normal infants become restless and cranky because their mothers are impatient or resentful of the trouble the infant causes them (Ross & Ross, 1976). Often the unhappy dyadic relationship deteriorates into a continuing battle, with the infant fighting back through restlessness and resistance as he finds himself unable to cope with his mother's demands for quiet, compliant behavior (Bettleheim, 1973).

The infant is dependent for survival on a certain kind of mothering if he is to develop his innate capacities in an adequate or optimal way. The outcome of development for any particular individual will depend on the interaction between the faculties with which he is born and the forces of his environment. Initially, the mother is the predominant environmental force. Great differences in a child's development result from the degree to which the mother can meet his physical and emotional needs (Walters, Connor, & Zunich, 1964).

By contrast, Bettelheim (1973) stated that the inability to learn, so often characterizing the hyperactive child, was partially a function of his low self-esteem and restlessness, but was primarily the child's way of defending himself against an environment that had been characterized since his infancy by rejecting agents of socialization. The increasing demands to perform lead to an inability to perform at the level expected on the basis of the child's intelligence or to an inability to perform at all. Bettelheim portrays the child as driven into a state of hyperactivity and advocates more warmth, acceptance and flexibility on the part of women in the child's environment, the implication being that the same child would probably be able to maintain an acceptable pattern of behavior if the environmental stresses were modified.

Of relevance to the latter point is a study by Gelfand (1973) in which the task performance of children with minimal brain dysfunction was compared under two sets of conditions. In one condition the child was required to perform the experimental task in the presence of his mother; in the other he performed the task in the presence of an experimenter whom he knew well, and who created an interpersonal climate that was as different as possible from that with his mother. The maternal climates were more nonresponsive and generally more negative than those of the

experimenter. The hypothesis that the children would perform better with the experimenter was confirmed. They showed greater absorption in the task and more exuberance with the experimenter, whereas their behavior with their mothers was more distractible, angry and anxious. These results were consistent with Bettelheim's view that the child's behavior and performance are not isolated variables; instead, they vary with the general behavior and affect of socialization agents within specific interpersonal situations.

There is other support for the etiological explanation proposed by Bettelheim. In two studies, Henderson, Dahlin, Patridge, and Engelsing (1973-1974) believed that the mother can be the primary source of the child's difficulty, thus in support of Bettelheim's view. They also thought the infant could set off the difficult relationship. They felt that the etiology of hyperactivity was a series of reactions in which there was an overreaction to touch stimulus which manifested itself as an avoidance response in the child. This in turn evoked negative feelings on the part of the caretaker of the child. The infant's fussiness and difficult behaviors caused the mother to become tense, guilt-ridden and anxious. This resulted in a tense and difficult dyadic relationship between the mother and child. Henderson et al. (1974) noted that such difficulties may also originate

with the mother; inadequate maternal handling may result in a calm child becoming a problem. To modify the early avoidance response patterns Henderson and his associates recommended an increase in the amount of physical contact.

In a study by Battle and Lacey (1972), the mothers of hyperactive male infants were reported to be critical of their difficult babies during infancy and to show a lack of affection for them. They also found the mothers to be disapproving during the preschool years and tending to pressure the child to be independent. These mothers tended to use severe penalties for disobedience during the primary school years and assessed their sons' intelligence lower than did mothers of boys with a moderate level of activity.

The child's development is dependent upon the nature of the information available to him, as well as the ability to make sense of this information. The child and his human and material environment all interact to constrain and direct future development. Two categories of his environment, family and school, stood out as being distinctive in the life of the child.

Family Relationships

Liebman (1959) suggested that the child is intimately influenced by a complex of biological and psychological reactions which arise within the family constellation,

noting that family relationships are important in the development of attitudes, feelings and behaviors of the child. Because of the nature of the child's biological and psychological organization, he becomes susceptible to the tensions created by his external and internal environment. A child's life reflects the psychodynamics of family life, as he structures his role to fulfill his own needs, the needs of his family and the needs of society. Children exhibit a complicated interplay in which the child's role patterning represents a fusion of all of these functions.

Among the first to report the effects of inadequate home environments were Coleman and Provence (1960). They described the development of two young children who were retarded in motor, social, and language skills. They reported interviews with the mothers which revealed that these young children received minimal handling with a paucity of physical contact; there was little verbal communication between mother and child, few play opportunities, and little overt expression of positive emotional feeling from mother to child.

The emotional climate in the home also appeared to affect the intellectual development of children. In a study of data derived from 45 families containing 89 subjects, Kagan and Moss (1962) reported on the influence of maternal practices on child behavior. Child behavior and maternal

practices were evaluated by means of interviews and extended naturalistic observations in the home. They found the more stimulation that was provided by the mothers the greater the cognitive development.

The importance of child care was supported in a study done by Schaefer (1969). He reported significant correlations between methods of child care, children's behavior and mental scores for 31 children at 30 months of age. From data obtained during visits in the home, child neglect was correlated highly with maternal uninvolvedness. He also found that child neglect and maternal hostile uninvolvedness correlated significantly with low mental scores.

The child's behavior and development are influenced by his physical, social, and cultural environment. The family variable appears to be of significance in the treatment and prognosis of hyperactive children (Mendleson, Johnson, & Stewart, 1971).

Several writers have implied that parental norms are important in determining whether or not a child was viewed as hyperactive (Conrad, 1976; Ross, 1976). Barkley and Cunningham (1978) noted that although hyperactive children were not more socially responsive while on medication, their mothers tended to perceive their behavior as more acceptable.

Dr. Marcel Kinsbourne (1973) found that parents are one of the prime sources in the identification of hyperactivity.

In his study he found that when parents are initial identifiers of behavior as deviances, the identification is made in terms of child's role performance expectations.

In contrast, a hyperactive child's behavior in the home can legitimately be exasperating and frustrating for the prents as well as other family members. His behavior was characteristically identified as being disruptive, distractible, and creating problems for his siblings. In a study by Luisada (1969), it was found that hyperactive children are often light sleepers with sleep patterns that were qualitatively different from those of normal subjects. The hyperactive child in Luisada's study spent less of his total sleep time dreaming, had fewer dreams per sleep period, and more frequently disrupted dream periods by awakening.

Ames (1975) found that overactivity in school was related to an unhappy or unpleasant home situation. She felt that if the child's underlying emotional problem was properly handled by the parents, then his hyperactivity and learning problems improved.

In a study by Toman (1976) it was found that the family's influence on a child's behavior in school was usually greater than the school's influence on his behavior in the family. In essence the family continues to play the crucial role in the development of the child by providing

him with a focus of experience as a frame of reference for organizing his world.

If both parents are working, they will have to entrust their child to the care of someone else and thereby will lose a portion of their parental role. Toman (1976) felt that those persons who take care of the children were likely to become their psychological parents. The caretakers in life and family situations may exert greater influence on the child than do the actual parents through their life and family situations.

Current trend analysts suggested that increasing numbers of mothers work and that the total number of parental working hours are increasing. They stated that the overriding factor in the child's development was the quality care in the absence of the parents (Fein & Stewart, 1973).

In a study by Yarrow and Radke (1961) maternal employment was a special kind of variable in the study of child development, a psychological variable in respect to its meaning to the mother. It may be a contributor to self-esteem, a focus of critical inner conflict, a personal competitiveness, a means to economic survival, a need for attainment of social goals, an escape or an involvement received supportively in her life. All these meanings and many more were represented in the mother's decision whether or not to work.

Maternal employment brought a number of structural changes in the child-rearing environment. In the traditional family child rearing was the responsibility of a pair of parents, with the mother assuming primary care and socializing functions and the father assuming specialized or more diluted responsibilities. For the family with a working mother the structural changes most frequently found were the techniques of control, degree of supervision and methods of discipline. Working mothers were found to bring several authority figures and affectional figures into the child's life at an early age which can be confusing for the child. It was further noted that working separates mother from child for a long period of time (Yarrow & Radke, 1961).

The optimal environment for the young child was one in which the child was cared for in his own home in the context of a warm, continuous emotional relationship with his mother. The child's mother was the person best qualified to provide a stable, warm interpersonal relationship as well as the necessary patterns of sensory stimulation (Caldwell, 1967).

Gofarb (1945) noted that parent-child relationships have an effect on the pattern of social and emotional growth and development in the child. Disturbances in the

parent-child relationship often became highlighted in behavior and personality symptoms in the child.

Child Management and Discipline

Research by Becker (1964), Hoffman (1960), Kamii and Radin (1967), White (1966), Chillman (1968), Bayley and Schaefer (1964), and Olin, Hess and Shipman (1967) revealed that there are contrasting methods of discipline between socioeconomic groups of people.

Discipline in the lower class families was more likely to be physical (Becker, 1964), severe (White, 1951), harsh, unpredictable and authoritarian (Chillman, 1968). Lower-class parents frequently used "power-oriented" techniques of control, deprivation and ridicule (Becker, 1964), punishment and power assertions (Bayley & Schaefer, 1964; Hoffman, 1960). Parents in the upper class families, by comparison, were more likely to favor "love-oriented" punishment techniques: withdrawal of love, isolation, show of disappointment, and guilt-arousing appeals (Becker, 1964). Upper class methods of control were also based more frequently on cognitive rational appeals; parents gave instructions rather than commands (Olin, Hess, & Shipman, 1967). When they did give orders, they were accompanied by consultation or explanation (Kamii & Radin, 1967). These types of parents also used reasoning to control their

children (Becker, 1964). Becker found that the middle class parent was the most permissive when compared to the working class about demands for attention, sex behavior, aggression toward parents, neatness, table manners, bedtime rules, and general obedience.

Wortis (1963) found, as did Bayley and Schaefer (1960), that mothers in the low socioeconomic class were more primitive and rejected their children more than did middle class mothers. The children were reported to have been treated with relative coldness. When the children were 2½ years old, there was lack of restrictiveness by the mothers; but at 5 years there was much restrictiveness in regard to sex play and aggression against parents. Marans and Lourie (1967) hypothesized that the restrictiveness of the mother of the disadvantaged child depended on her need to assert authority.

Parental restrictiveness in the child's first three years of life has been associated with a greater conformity, less dominance, less competition with peers, more dependence on adults, less mastery behavior, more inhibition (Becker, 1964), less play behavior (Tulkin, 1969), retarded motor development (Williams & Scott, 1953), and lack of initiative (Antonovsky, 1959). Becker (1964) concluded that restrictiveness may lead to well-controlled social behavior, but tended toward fearful, dependent, submissive behaviors,

to dulling intellectual striving, and to inhibited hostility.

Restrictiveness has also been found to be detrimental to performance on IQ tests, language maturity and nonverbal ability (Baldwin, Kalhorn, & Breese, 1945; Bing, 1963; Kagan & Freeman, 1963; Marge, 1965; White, 1966). Granting the child independence appeared to be generally beneficial for his development. Such independence has been associated with high IQ scores in 2 and 3 year old children (Bayley & Schaefer, 1960), competent nursery school behaviors (Baumrind & Black, 1967), reading achievement at 7 years (Rau, 1964), higher differentiation at 10 years (Witkin, 1962), flexible thinking at 11 years (Busse, 1967), and higher achievement at 15 and 16 years (Shaw, 1969).

Pavenstedt (1965) described the child-rearing environments provided by lower class families as impulse-determined with little evidence of clear planning for activities that would benefit either parent or child. Similarly, Wortis (1963) described the overwhelming extent of the problems of the low-income mother. Reactions of depression and inadequacy cause behavior toward the child to be determined largely by the needs of the moment rather than any clear plan about how to bring up or train children to engage in behavior that the parents regard as acceptable or desirable.

Becker (1964) found that parents in the lower social classes were less consistent in their disciplinary behaviors than parents in a higher socioeconomic status. This inconsistency was apparent whether one was considering behaviors of the same parent at different times or the two parents in the same family. Inconsistency of discipline between father and mother or in the behavior of a single parent had been associated with more aggression and crime in children thus disciplined.

Child's Personality

Ament (1974) noted that very few hyperactive children were free of psychiatric problems. In case studies the hyperactive child was depicted as sad, unhappy or depressed. Such feelings may stem from a poor self-concept and feelings of hopelessness which in turn may be linked to parental rejection of the child. In a discussion of the relationship between depression and hyperactivity, Zrull, McDermoth, and Poznanski (1970) hypothesized that depression may stem from a poor self-image that begins with parental, particularly maternal, rejections of the infant who manifests hyperactivity early in life. These authors stated that the child's negative feelings about himself were likely to be reinforced by his awareness, early in the preschool years, that he could not control his impulsivity or his motor

behavior and that he was unable to meet many of his parents' expectations concerning his performance.

Stewart and Olds (1973) stated that the hyperactive child has a poor self-concept which was exacerbated or increased by the fact that he was unable to play games properly and consequently disrupts them. They also found that the hyperactive child's tendency to be easily distracted, coupled with his poor emotional control, resulted in his being labeled as a "quitter," a "cry baby," or a "poor sport" (Stewart & Olds, 1973). Studies by several other authors suggested that hyperactive children were likely to exhibit a lower self-concept (Campbell, 1964; Loney, 1974).

In the study by Ross and Ross (1976) the behavior of the preschool child was found to generally show little concern for others' feelings and to be genuinely unaware when he had hurt another child. He often was unable to meet parental or teacher demands, and this failure plus his difficulties in peer relations laid the foundation for his poor self-concept. In order to gain some kind of recognition the hyperactive child frequently resorted to negative attention-getting behavior.

In contrast to earlier reports claiming that hyperactive children "outgrew" their symptoms (Laufer & Denhoff, 1957; Lytton & Knobel, 1958), more recent studies

suggested that at adolescence these children continued to have serious educational, emotional and social problems despite some improvement in their symptoms (Mendelson, Johnson, & Stewart, 1971; Minde, Lewin, Weiss, Lavigueur, Douglas & Sykes, 1971; Weiss, Minde, Werry, Douglas & Nemeth, 1971). Weiss et al. (1971) found that, compared to a normal control group, their group of 64 adolescents reinterviewed five years after initial referral for hyperactivity had failed significantly more grades and had received significantly poorer report card marks on nearly all academic subjects. They also showed signs of emotional immaturity, lack of ambition, feelings of hopelessness, and markedly low self-esteem as well as some social difficulties. Specifically, 25% of the group had a history of antisocial behavior, 30% were reported by their mothers to have no steady friends, 25% showed acting-out behavior, and 10% had been court referrals. Similar findings were reported by Mendelson et al. (1971) who studied 83 hyperactive adolescents. Thus, academic underachievement, low self-esteem and antisocial behavior would appear to be common characteristics of hyperactive children at adolescence.

A study was done by Cohen, Weiss, and Minde (1972) to assess the functioning of a hyperactive group at adolescence against a normal control group from a similar social background. Evidence from the self-assessment tests

indicated that hyperactive adolescents not only had lower self-esteem scores but reported difficulties in mixing with peers. They reported spending most of their time alone or with younger children rather than with peers as did the controls. Such a finding is consistent with the study by Battle and Lacey (1972) who found that the aberrant social behavior of hyperactive children elicited rejection by their peers. Similarly, as suggested by Mendelson et al. (1971) the hyperactive adolescents had been cautioned by the police significantly more often than had the control group.

Summary

The history of the hyperactive child syndrome is consistent with either or both an environmental or genetic origin. The syndrome usually begins early in life. Some of the more obvious symptoms, such as overactivity, improve; but impulsiveness, poor concentration and excitability continue (Morrison & Stewart, 1963). The continuance and inappropriateness of these behaviors is burdensome not only for the child but also for the family, school and peer relations.

The hypotheses advanced for this study were:

1. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with

hyperactive child syndrome in the area of family structure and environment.

2. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of interpersonal relationships within the family.
3. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child discipline.
4. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child management.
5. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with hyperactive child syndrome in the area of child responsibility.
6. There will be no differences between families who have a child within the family unit with hyperactive child syndrome and families who do not have a child with

hyperactive child syndrome in the area of child independence.

Chapter 2 has established the theoretical basis of this study. Chapter 3 will discuss the methodology used.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

Study Design

The researcher utilized the nonexperimental, descriptive research design. The data needed for the purpose of this study was based on information that was neither documented nor in large part observable. However, through a structured questionnaire and interview, it was possible to obtain needed data which described the factors of home and family environments under investigation.

Setting

The setting for the completion of the questionnaire and interviews took place in southeast Texas.

Population and Sample

The study population consisted of 20 subjects forming two groups; each group contained 10 families. Group A consisted of families with hyperactive children and Group B consisted of families with nonhyperactive children. The families of the group of hyperactive children comprised a convenience sample that included 10 subjects meeting the following criteria:

1. Identified as hyperactive by a physician and/or a clinical psychologist.
2. Between the age of 4 to 10 years.
3. Residing in southeast Texas.
4. Possessing no observable language or neurological dysfunction.

The sample for the comparative group of subjects was comprised of families of nonhyperactive children. This sample was chosen by the convenience method from different school districts and included 10 subjects. The subjects selected met the following criteria:

1. No diagnosed hyperactive behavior.
2. Between the age of 4 to 10 years.
3. Residing in southeast Texas.
4. Possessing no observable language or neurological dysfunction.

Instrument

The instruments used for this study were a questionnaire and a structured interview developed by the researcher (Appendices A and B). A literature search established content validity of the questionnaire and structured interview.

Procedure

Subjects were identified through diagnoses of hyperactive child syndrome in school records and through

talking with school personnel. Families of the subjects were first contacted by telephone to explain the purposes of the study and to determine their interest in participating in the study. If they verbally agreed to participate, a questionnaire was mailed to them for completion and a time arranged for an interview. The questionnaire, providing family background information, was completed by the families before the interview took place. The researcher retrieved the questionnaire at the time of the structured interviews. (A sample questionnaire may be found in Appendix A.) The interview questions and their order were predetermined; however, the interviewer had the freedom to repeat questions and to use nondirective probes to elicit or clarify information. (A sample interview may be found in Appendix B.)

Treatment of Data

A chi square was used to statistically analyze the data. Significant differences in the mean scores for each hypothesis between the two groups of subjects were determined in this manner.

Summary

This study was descriptive and nonexperimental in design. The population was derived from families of diagnosed hyperactive children and families of nonhyperactive children.

The sample, selected by the convenience method, included a total of 20 subjects. The subjects consisted of males and females between the ages of 4 to 10 years who resided in southeast Texas, and who had no observable language or neurological dysfunction. The instruments used were a questionnaire and a structured interview. A chi square was used to statistically analyze the data.

Chapter 4 will analyze the data of this study.

CHAPTER 4

DATA ANALYSIS

The purposes of this study were: (1) to identify organizational and interrelational factors common to families who have children with hyperactive child syndrome; and (2) to determine if these factors were different in home environments where there were no children with hyperactive child syndrome. Data were obtained through a questionnaire and structured interview developed by the researcher. The results of the study are presented in this chapter.

Description of the Sample

The population from which the sample was drawn consisted of families of 20 children between the ages of 4 to 10 years who resided in southeast Texas.

Group A included families of children who had been diagnosed as hyperactive. The sample, chosen by the convenience method, consisted of 10 subjects. The subjects had been identified as hyperactive by a physician and/or clinical psychologist and had no observable language or neurological dysfunction. Group B included families of non-hyperactive children. This sample, also chosen by the convenience method from different school districts, included

10 subjects. These subjects had no diagnosed hyperactive behavior and no observable language or neurological dysfunction.

The mean age of the total group of children was 8.2 years. The mean age of Group A was 8.0 years and of Group B was 8.3 years. There were 4 girls and 16 boys in the total groups, 2 girls and 8 boys in each group, A and B. In the total group, there were 17 subjects of Caucasian descent, 2 of Mexican-American descent, and 1 of Negro descent. In Group A, there were 8 Caucasians, 1 Mexican-American, and 1 Negro; Group B had 9 Caucasians and 1 Mexican-American. See Table 1.

Table 1

Distribution of Sample According to Age, Sex, and Ethnicity

Group A (Hyperactive) (n=10)				Group B (Nonhyperactive) (n=10)			
Age in Years	Sex	Ethnic Descent ^a		Age in Years	Sex	Ethnic Descent ^a	
10	M	M-A		10	M	C	
10	M	C		10	M	C	
9	M	C		9	F	C	
9	F	N		9	M	C	
8	M	C		9	M	C	
8	F	C		8	F	M-A	
7	M	C		8	M	C	
7	M	C		7	M	C	
6	M	C		7	M	C	
6	M	C		6	M	C	

^aC denotes Caucasian; N denotes Negro; and M-A denotes Mexican-American.

Summary of Data

The questionnaire and structured interview contained a total of 60 items. The items elicited information in categories classified as demographic, sociological and psychological. Within the psychological area, further distinction was made among interpersonal relationships, discipline and child management and child responsibility and independence. The responses to questions were recorded and later analyzed by the chi square method. The mother consistently was the person giving the information from both groups, hyperactive and nonhyperactive.

In the demographic category, between the hyperactive and nonhyperactive groups, no significant difference was found in the amount of time spent by the parents at their present or previous addresses. One hyperactive and one nonhyperactive child spent six months or less at his present address; two nonhyperactive and no hyperactive children spent six to twelve months; three hyperactive and two nonhyperactive children spent one to three years; and six hyperactive and five nonhyperactive children spent three years or more at his present address. For the time spent at their previous addresses, no children, hyperactive or nonhyperactive, spent six months or less at their previous addresses. Three hyperactive and two nonhyperactive children

lived six to twelve months at their previous addresses; four hyperactive and five nonhyperactive children spent one to three years at their previous addresses; and three from each group spent three years or more at previous addresses.

No significant differences in hair or eye color were found between the groups of children. Four hyperactive and six nonhyperactive children had blonde hair. Four hyperactive children and five nonhyperactive children had blue eyes.

The grades in school showed no hyperactive children and one nonhyperactive child in kindergarten; three hyperactive and no nonhyperactive children in first grade; three hyperactive children and one nonhyperactive child in second grade; two hyperactive and six nonhyperactive children in third grade; and two children from both groups in fourth grade.

Fourteen children lived with their natural parents, six from the hyperactive group and eight from the nonhyperactive group; three lived with their mothers and stepfathers, one hyperactive and two nonhyperactive children. One hyperactive child lived only with his mother. Two hyperactive children lived with adoptive parents. (See Figure 1 for the above mentioned information.)

All the fathers in the study were employed. The mean age of the fathers ranged between 28 to 35 years. Five

Number of Children

0 1 2 3 4 5 6 7 8 9 10

Time Present Address

6 months or less

6-12 months

1-3 years

3 years or over

Time Previous Address

6-12 months

1-3 years

3 years or over

Hair Color

Blonde

Brunette

Brown

Eye Color

Blue

Brown

Other

Grade

Kindergarten

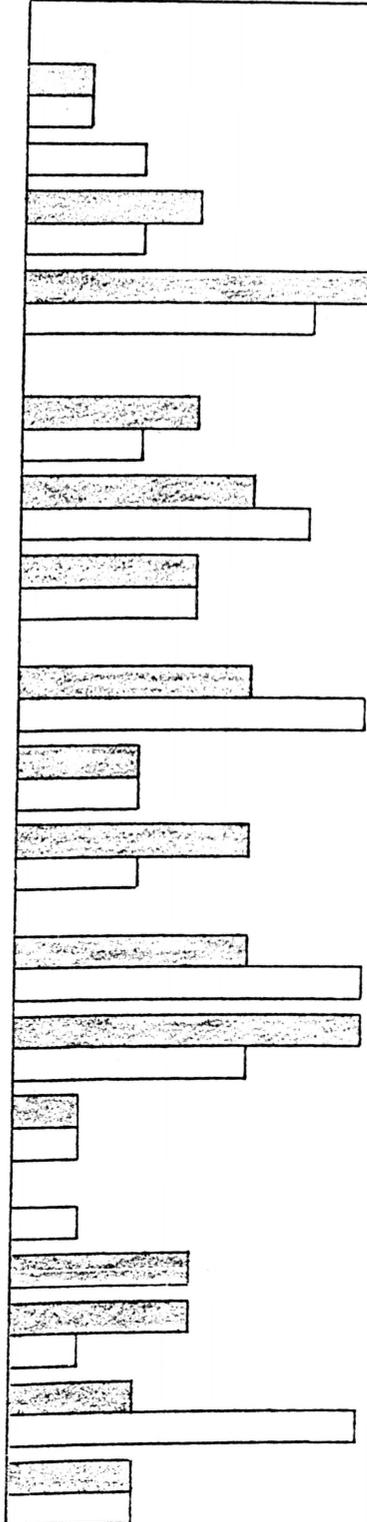
First

Second

Third

Fourth

Hyper-active
Non-hyper-active



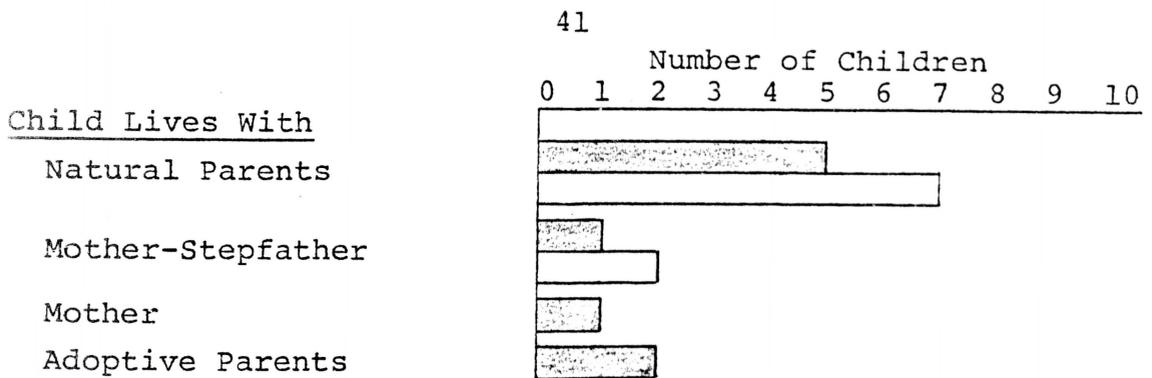


Figure 1. Demographic data showing amount of time spent at addresses, hair and eye colors, grade in school, and parents with whom child lives.

fathers of hyperactive children and seven fathers of nonhyperactive children were between 28 to 35 years. Two fathers of hyperactive children and three fathers of nonhyperactive children were between the ages of 35 to 40 years. Three fathers of hyperactive children and no fathers of nonhyperactive children were over 40 years old. All the fathers were in good health and were employed.

The type work the father did was closely related between both groups. In the hyperactive group, two fathers were blue collar workers, four were white collar workers, and four were self-employed. In the nonhyperactive group, two fathers were blue collar workers, five were white collar workers, and three fathers were self-employed. In the group of fathers from the hyperactive children, two had worked one to three years at their present job, one father

had worked three to five years, and seven fathers had been employed five years or more at their present job. In the nonhyperactive group, one father had been employed one to three years, five worked three to five years, and four fathers were employed five years or more.

The fathers' education was not significant according to the chi square analysis. There were no fathers of hyperactive children with less than a high school degree, while three fathers of nonhyperactive children had less than a high school degree. Three fathers of hyperactive children completed high school; two fathers attended college for two years; and five fathers completed a four year college degree. Three fathers of nonhyperactive children completed high school; two fathers attended college for two years; and two fathers completed a four year college degree. (See Figure 2 for information on the fathers.)

The mean age of the mothers was between 28 to 35 years. One mother from each group was between the ages of 22 to 28 years. Four mothers of hyperactive children and five mothers of nonhyperactive children ranged between 28 to 35 years of age. Four mothers from each group of children were between the ages of 35 to 40 years. One mother of a hyperactive child was over 40 years old. All the mothers from both groups were in good health.

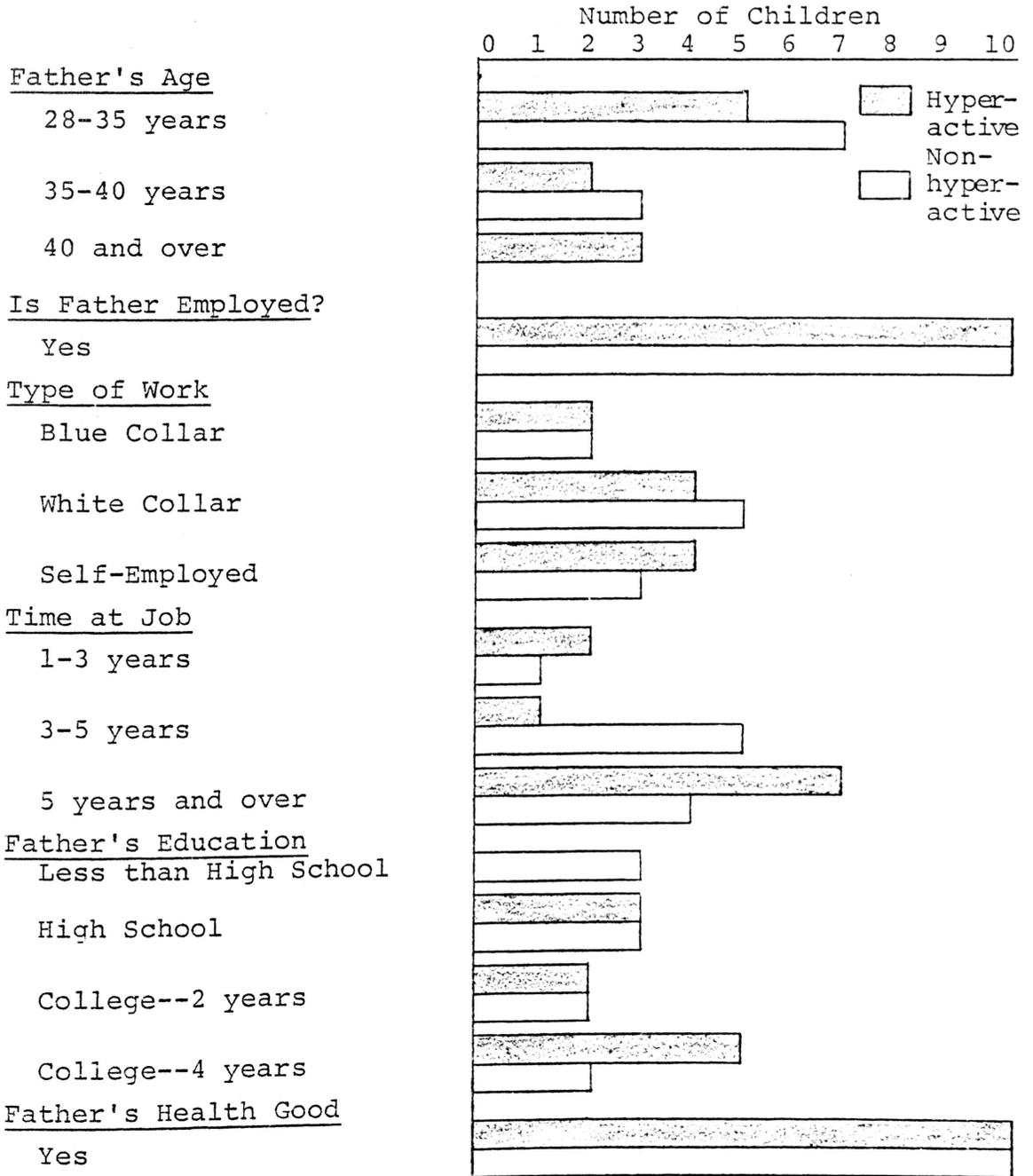


Figure 2. Demographic data showing information concerning the father's age, health, education and employment.

The education of the mothers was not significant according to the chi square analysis. In the group of mothers with hyperactive children, no mothers had less than a high school diploma; three mothers completed high school; two mothers attended college for two years; and five mothers obtained a four year college degree. In the group of mothers with nonhyperactive children, one mother had less than a high school degree; four mothers completed high school; two mothers attended college for two years; two mothers completed a four year college degree; and one mother had received technical training.

The mothers' employment was significant in this study. There was a significance of 0.03 for the mothers working, e.g., more mothers of nonhyperactive children had worked full time than had mothers of hyperactive children. Seven mothers of nonhyperactive children worked full time, while only two mothers of hyperactive children worked full time. Four mothers of hyperactive children and two mothers of nonhyperactive children had worked part time. (See Figure 3 for information regarding the mothers' age, health, education, and employment.)

Parents of three hyperactive children were step or adoptive parents, while there were no step or adoptive parents in the nonhyperactive group. The response to the

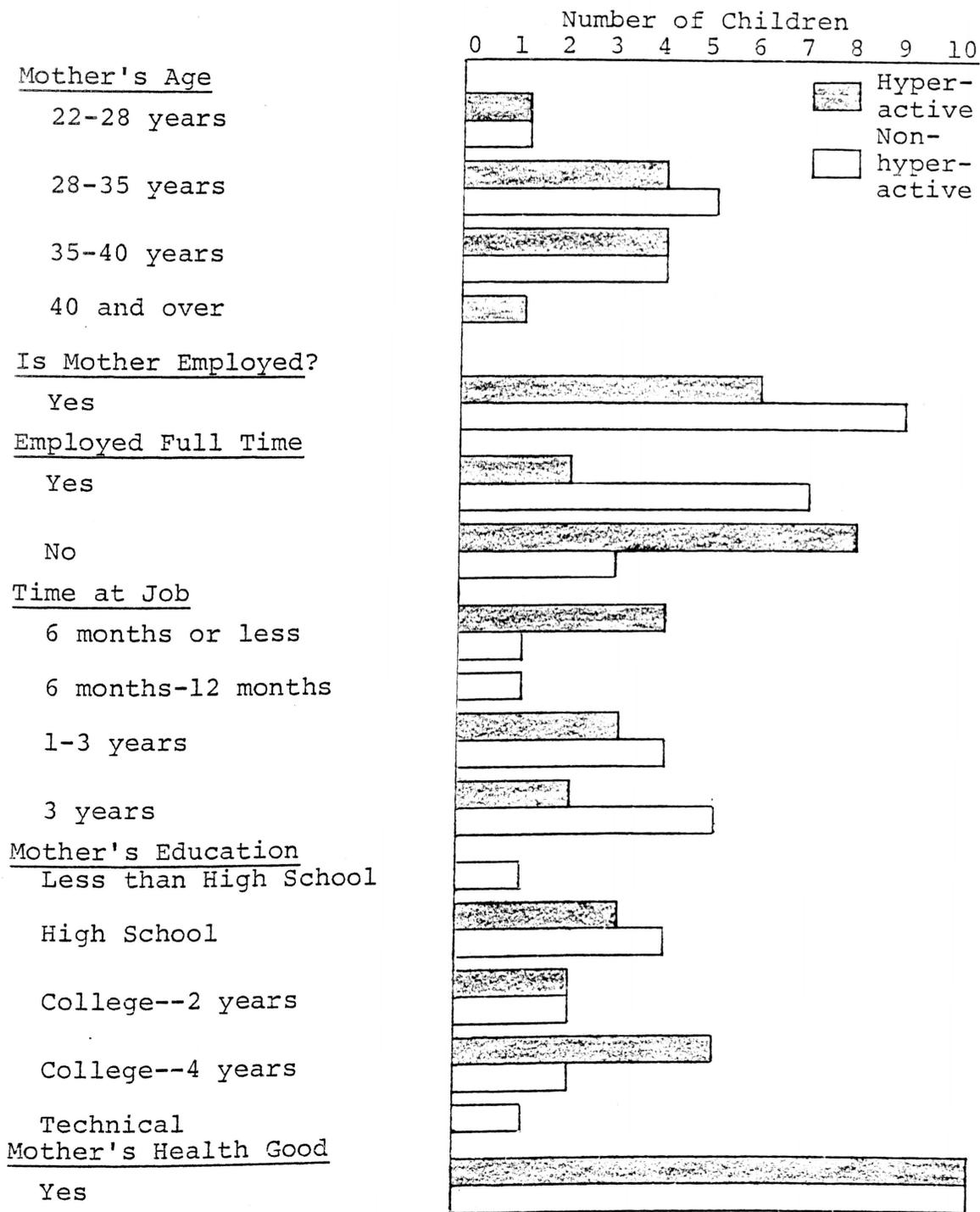


Figure 3. Demographic data showing information concerning mother's age, health, education, and employment.

natural parents being married or divorced was the same in both groups. Eight parents from each group were married and two parents from each group were divorced. The order of the child in the family demonstrated no significance. Six hyperactive and five nonhyperactive children were first in the family.

The type of religion or salary range was not significantly different between the groups of children. There was a total of 13 Protestants, 6 from Group A and 7 from Group B. Three were Catholic, one hyperactive and two nonhyperactive. Four children, three hyperactive and one nonhyperactive, were of religions other than those specified above. The salary range indicated a total of 10 families, 6 hyperactive and 4 nonhyperactive families, who made salaries of \$25,000 or less. Ten families, four hyperactive and six nonhyperactive, made salaries of \$25,000 to \$50,000. (See Figure 4 for information of parents' order or child in family, religion and salary range.)

Sociological Data

There was no significance in the mothers' working following the birth of the children; however, there was a significance of 0.07 in her working during the preschool years (2-5 years). Of the total mothers, 70% worked while 30% did not work. During work, nine mothers used the

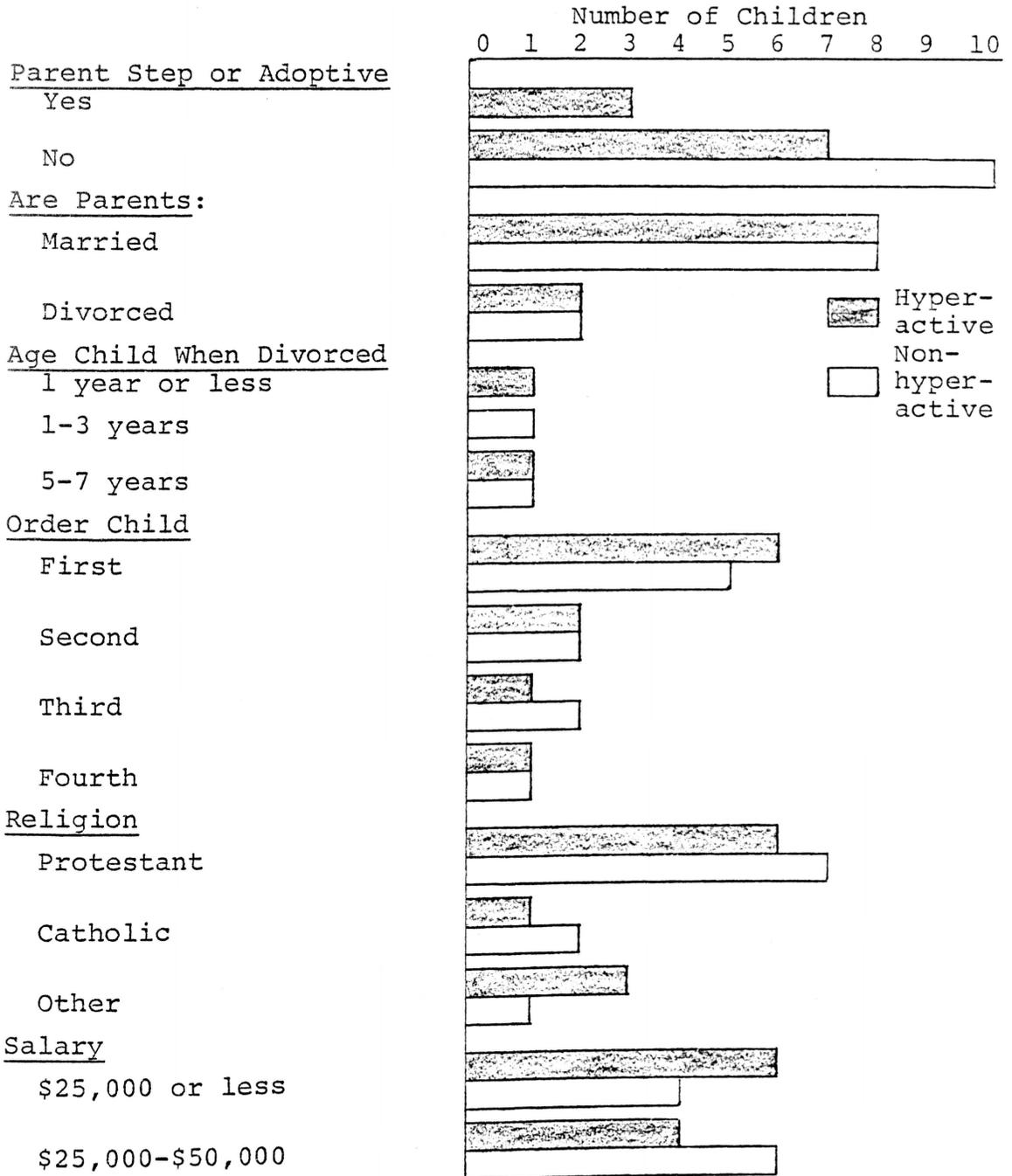


Figure 4. Demographic data showing information concerning parents' marital status, order of child in family, religion, and salary range.

nursery/preschool to care for the children, four mothers used a babysitter and one mother used a relative for child care. In the hyperactive group, four mothers used the nursery/preschool, and one mother used a babysitter. In the non-hyperactive group, five mothers used the nursery/preschool, three mothers used a babysitter and one mother used a relative to care for the child. (See Figure 5 for the above information.)

Data Regarding Interpersonal Relationships

All the parents of the hyperactive children reported that they participated in social/leisure activities outside the home without taking the child. Parents of eight non-hyperactive children participated in social activities in this manner and two parents did not. Six parents of hyperactive children went out once a month; one parent went out one to three times per month; two parents went out three to five times a month; no parents went out five to eight times a month; and one parent went out eight times or more per month. Three parents of nonhyperactive children went out once a month; three parents went out one to three times per month; two parents went out three to five times a month; two parents went out five to eight times per month; and no parents went out eight times or more. Five parents of hyperactive children reported that the children's behavior

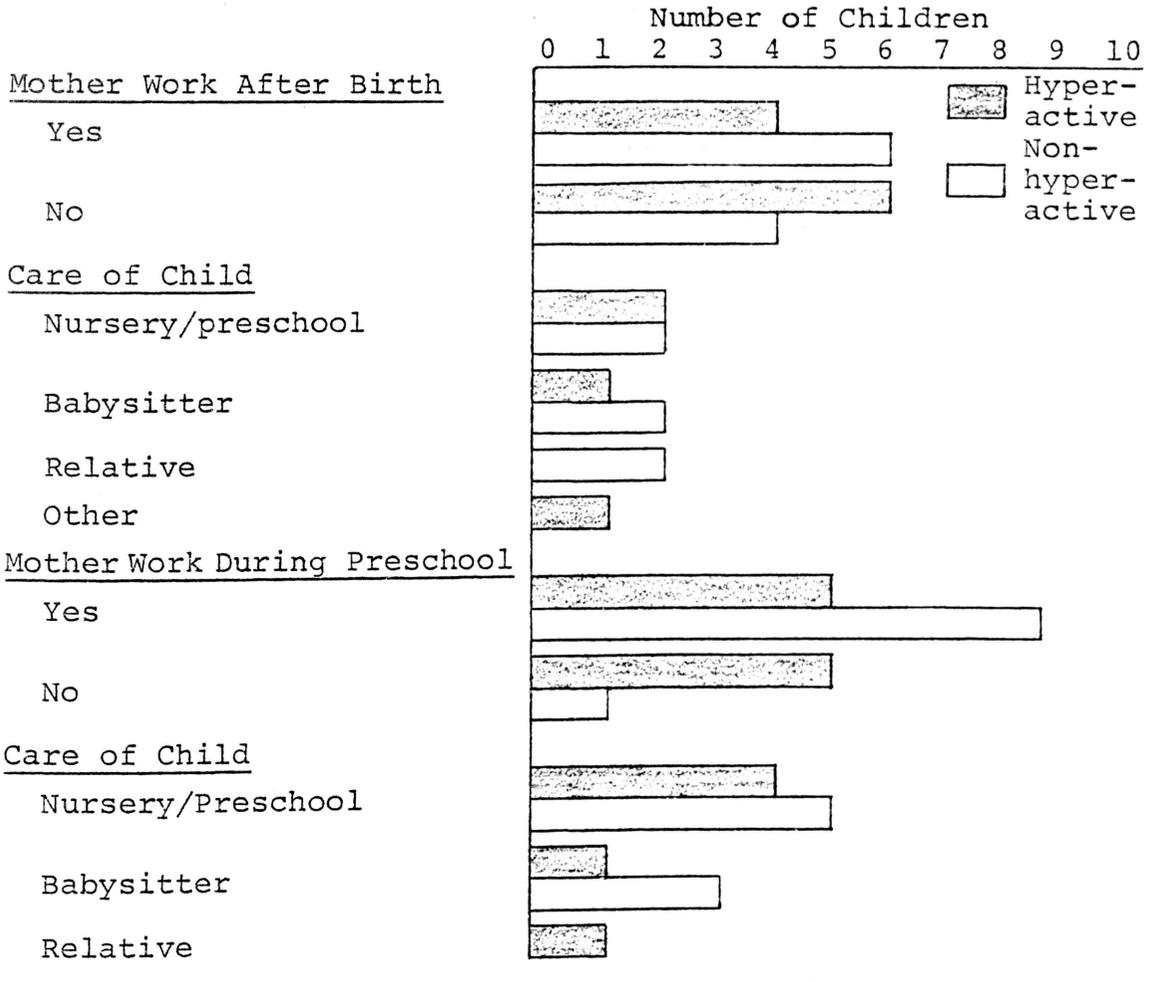


Figure 5. Sociological data showing information about the mother working and who cared for the child.

improved when left with someone else, while five parents said there was no improvement in their children's behavior. Six parents of nonhyperactive children reported their children's behavior improved, while four parents reported it did not improve. All the children from both groups got along with their siblings. They all had friends about the same age as themselves.

In response to the question about relationships of a child to persons outside the family, there was no significant difference. A total of six children related well to a friend, three hyperactive and three nonhyperactive children; nine children related to a relative, three hyperactive and six nonhyperactive; two hyperactive children related to a neighbor; and a total of three children related to no one, two hyperactive and one nonhyperactive.

A significance level of 0.03 was found in whether or not the child confided in either parent. A total of 11 children confided in one parent, 3 hyperactive and 8 nonhyperactive children; 9 children did not confide in either parent, 7 hyperactive and two nonhyperactive children.

A 0.05 significance level was found in the question concerning to which parent the child related. A total of nine parents responded that the child related to both parents, seven hyperactive and two nonhyperactive. Six

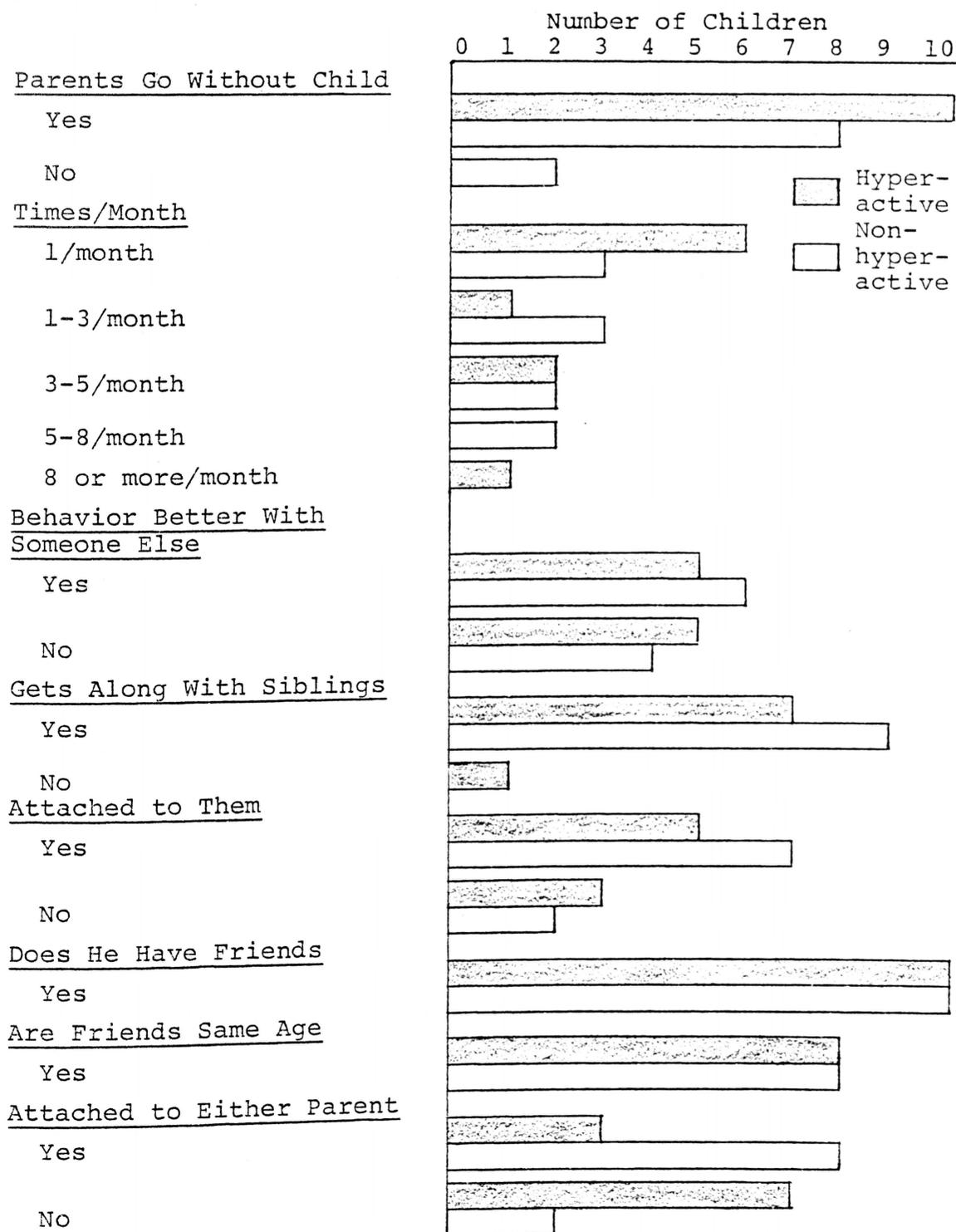
responses said the child related to the mother, one hyperactive and five nonhyperactive; and five responses said the child related to the father, two hyperactive and three nonhyperactive children.

No significance was found in whether or not either parent spent more time with the child. Eleven parents responded that one parent spent more time, while nine parents responded no. Of the nine negative responses, four were parents of hyperactive children and five were parents of nonhyperactive children. They all agreed that both parents spent equal time with the child. Nine parents concurred that the mother spent more time with the child, five parents of hyperactive children and four parents of nonhyperactive children. Two parents agreed the father spent more time with the child, one parent from each group of children.

There was little difference in response to the question about the entire family participating in activities together. Nineteen responded affirmatively, nine hyperactive and ten nonhyperactive. One parent of a hyperactive child said the family did not participate in activities together. (See Figure 6 for interpersonal data.)

Data Regarding Child Discipline and Management

In response to which parent reprimanded the child, eight parents said the mother, four parents from each group.



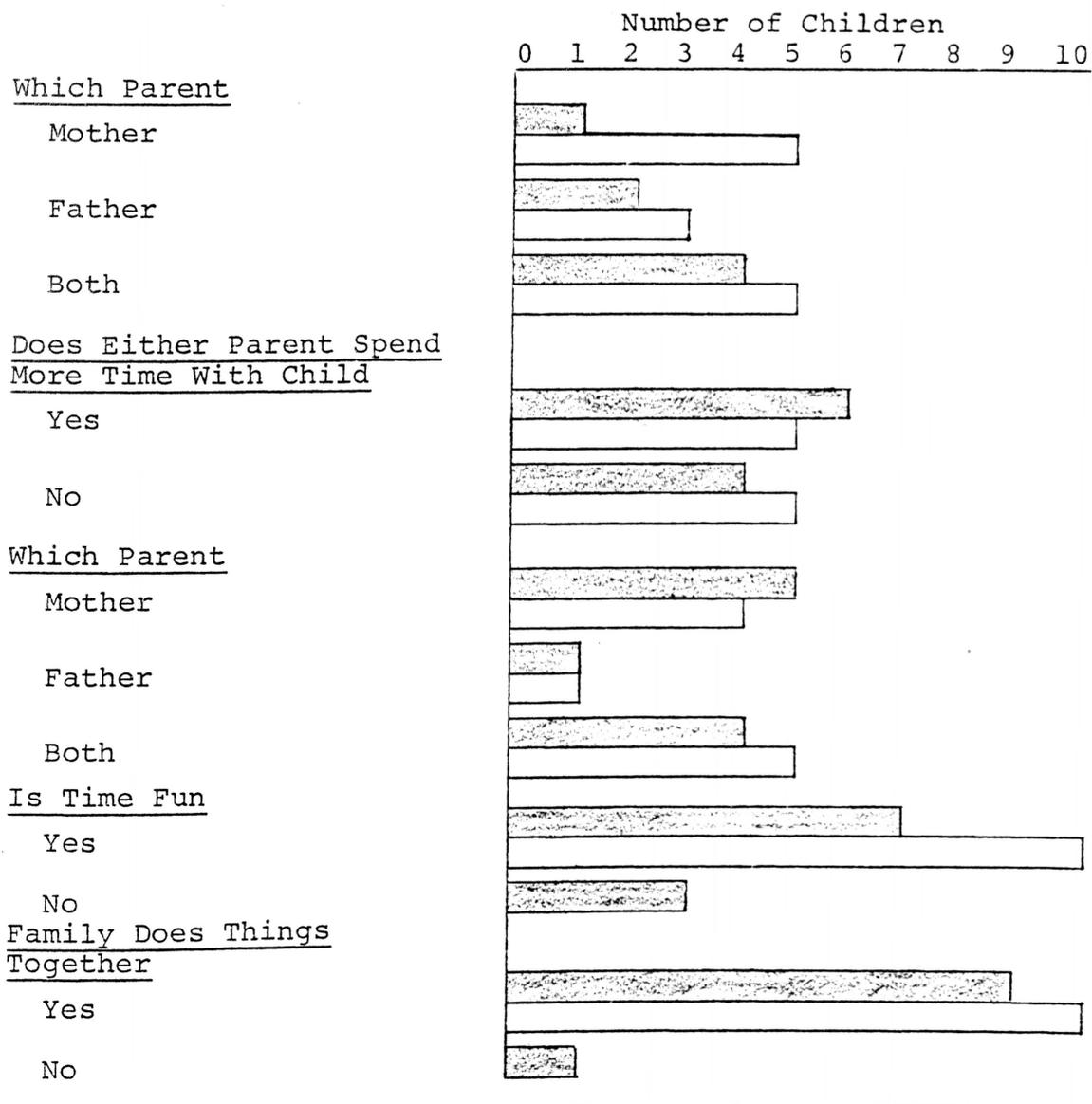


Figure 6. Psychological data showing information concerning the interpersonal relationships within the family.

Four parents said the father, two parents from each group. Eight parents agreed that both parents disciplined the child, four parents from each group. Similar methods of discipline were used. Only one parent of a hyperactive child used spanking, one parent of a hyperactive child used isolation; eight parents, three hyperactive and five non-hyperactive, used restricting privileges; eight parents, four from each group, used all three methods of discipline; and two parents, one from each group, used another unmentioned form of discipline. All the parents concurred that their methods of discipline were effective. (See Figure 7 for data relating to discipline and child management.)

Data Relating to Child Responsibility
and Independence

No significant difference was noted in whether the child goes places without supervision. A total of nine parents allowed their child to go places without supervision, four parents of hyperactive children, and five parents of nonhyperactive children. A total of 11 parents did not allow their child to go places without supervision, 6 parents of hyperactive children and 5 parents of nonhyperactive children. The majority of the parents gave their children chores to do. Seven hyperactive children had chores to do, while three did not. All of the group of

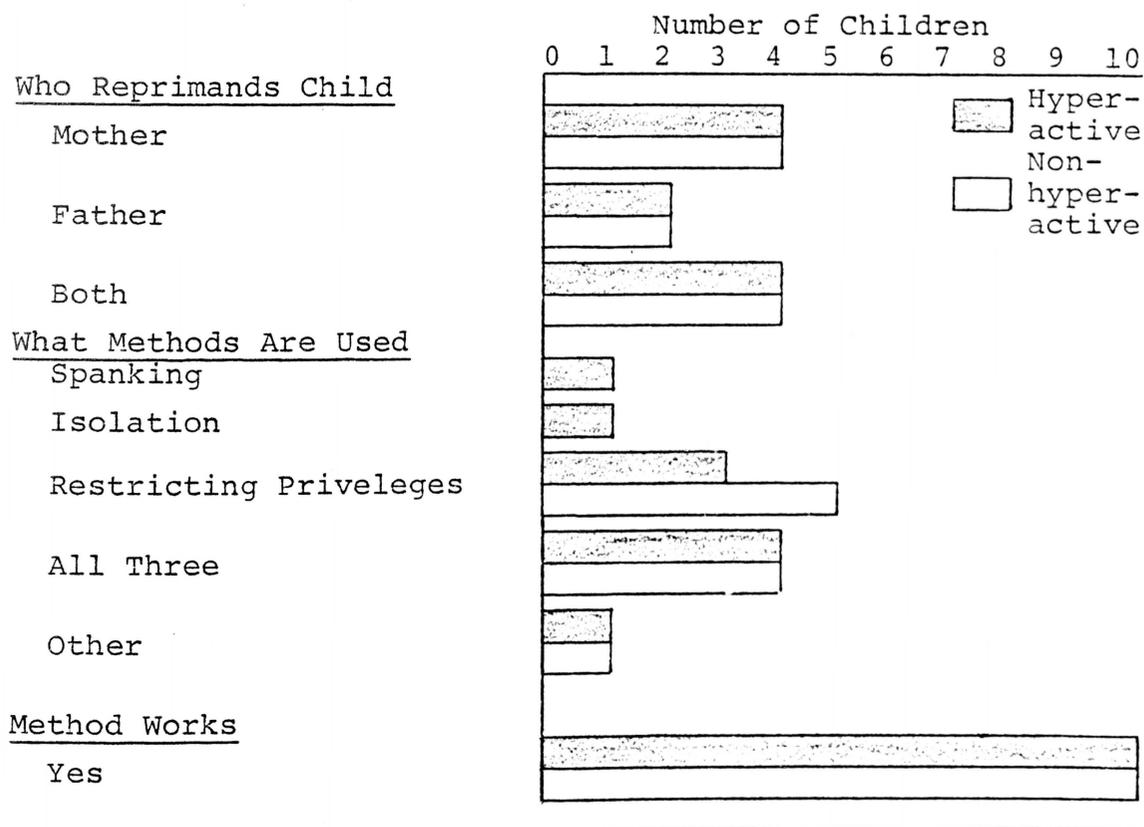


Figure 7. Psychological data showing information concerning child discipline and management.

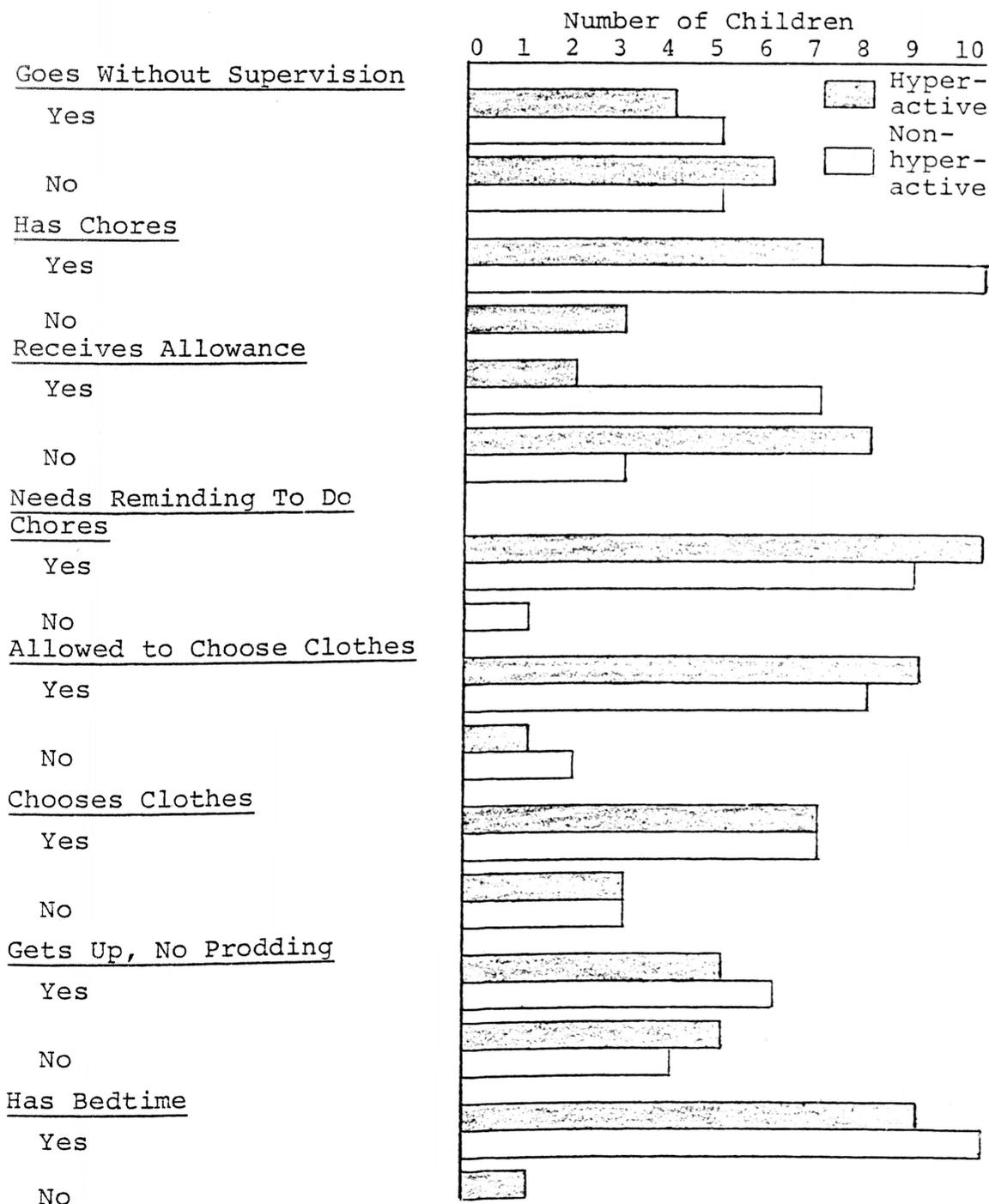
10 nonhyperactive children did chores. Of the seven hyperactive children who did chores, two children received an allowance for doing these chores. Of the 10 nonhyperactive children who did chores, only 7 received allowances. All the parents of the hyperactive children stated that their child needed reminding to do the chores, while only 1 of the 10 nonhyperactive children needed to be reminded to complete his chores. More hyperactive children were allowed to choose their own clothing than were

nonhyperactive children. Nine hyperactive children chose their own clothing, while one did not. Eight nonhyperactive children chose their own clothing, while two did not. No difference was noted in the child's ability to dress without prodding. Five hyperactive children dressed without prodding, while five needed prodding. Six nonhyperactive children needed prodding, while four dressed without encouragement. All the nonhyperactive children had a bedtime to follow, and only two children needed prodding to go to bed. Nine hyperactive children had a bedtime and one child did not. Seven of these children needed reminding to go to bed, while two children did not. (See Figure 8 for information regarding responsibility and child independence.)

Summary

From the results of the data obtained from the questionnaires and interviews, the mean age of the total group was 8.2 years; 90% were of Caucasian descent and 80% were of the male sex. The mean age of the fathers from both groups was 28 to 35 years. The mean age of the mothers was also from 28 to 35 years.

There was a significant difference in the following questions: (1) Whether or not the mothers were employed had a significance level of 0.03; (2) if the child confided in



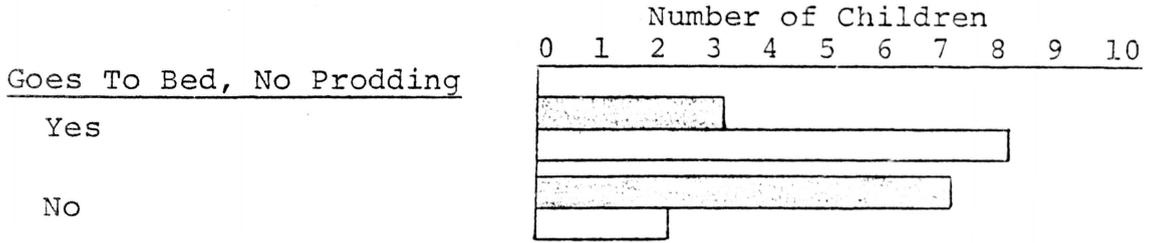


Figure 8. Psychological data showing information concerning child independence and responsibility.

one parent had a significance level of 0.03; and (3) which parent the child confided in demonstrated a significance level of 0.05.

The following chapter will include the summary, conclusions, and recommendations.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The preceding chapters have reviewed relevant literature and described methodology used to secure data concerning significant factors in the structure and environment of families with hyperactive and nonhyperactive children. This chapter summarizes the study and discusses conclusions and recommendations.

Summary

This study was conducted to identify factors which differentiated between families whose children were diagnosed as hyperkinetic and families with children assessed as non-hyperkinetic. The purposes were to: (1) identify organizational and interrelational factors common to families who had children with hyperactive child syndrome, and (2) determine if these factors were different in home environments where there were no children with hyperactive child syndrome.

The hypotheses advanced for this study were that there will be no differences between families who have children within the family units with hyperactive child syndrome and families who do not have children with hyperactive child syndrome in the areas of: (1) family structure and

environment, (2) interpersonal relationships, (3) child discipline, (4) child management, (5) child responsibility, and (6) child independence.

A theoretical approach to hyperkinetic behavior and its influence on the child's environment was presented in the review of literature. The literature review was divided into the following areas of discussion: (1) genetic factors, (2) environmental factors, (3) family relationships, (4) child management and discipline, and (5) child personality.

A nonexperimental descriptive research design was utilized through a structured questionnaire and interview conducted in southeast Texas. The sample, selected by the convenience sampling method, included a total of 20 subjects. These subjects comprised two groups, each representing 10 families. The subjects in these families consisted of males and females between the ages of 4 and 10 years. The subjects resided in southeast Texas and had no observable language or neurological dysfunction. The data obtained were analyzed by the chi square method and were presented in narrative and tabular form in Chapter 4.

Based on the findings of the study, it was concluded that there was minimal statistical significance found among differences between the groups of families with hyperactive

and nonhyperactive children. This may have been related to a sampling error in the convenience sampling method. The sample size was small ($n = 20$), and therefore may not have been clearly representative of the general population. It was felt by the investigator that the reporting parents may have been limited by memory and candor. This was particularly evident when interviewing families of nonhyperactive children. The parents of hyperactive children spoke more willingly about their children's behavior. This may have been due to the mothers' awareness that their children's behavior at times was difficult to manage.

The general analysis of data revealed that families with hyperactive children were not very different demographically from those families with nonhyperactive children. The majority of the parents were 28 to 35 years old, of Caucasian descent, married, Protestant, and middle class families with average annual incomes of \$25,000. The fathers were all employed and possessed approximately the same educational levels. Demographic data concerning the children's hair and eye color and grade in school were not significantly different between the two groups of children. The majority of the children had blonde hair, blue eyes, and were in the first grade in school.

The significant difference in the number of working mothers of nonhyperactive children compared to the number of

working mothers of hyperactive children raises several questions. Was the mother of a hyperactive child unable to work as a result of the hyperkinetic behavior in the child? Was the mother unable to find competent child care for her hyperactive child? Did she feel that her responsibilities of caring for the hyperactive child were too great to place on someone else? Did she feel that she was the person most capable of dealing with the hyperkinetic behavior? It is felt that perhaps one or all of these questions could be answered affirmatively and that they could have contributed to the mother's decision not to work. It is recommended that future studies direct attention to these questions.

From data measuring interpersonal relationships, the questions showing significance were related to the child showing preference for one parent. The response was significantly different between the groups. The mothers of the hyperactive children consistently reported that their children were attached to both parents, while mothers of nonhyperactive children reported their children showed preference for one parent. It can be conjectured that if the hyperactive children actually showed no preference for either parent, this may have appeared to indicate equal preference. Perhaps their show of preference was not as easy to distinguish as that of the nonhyperactive children.

Many of the questions in the interpersonal category were inconsistent with the literature review, i.e., Stewart and Olds (1973) stated that hyperactive children have fewer friends than do nonhyperactive children. In this study, 100% of the parents stated that their hyperactive children had friends and got along with their peers.

Data regarding discipline and child management were consistent with the literature review. In this study, more families used restriction of privileges as a method of discipline. These parents also had achieved a higher level of education. The parents who used spanking as a method of discipline had high school or lower than a high school level of education. These findings concurred with Becker (1964) who stated that discipline in lower class and less educated families was more likely to be physical.

Data describing child responsibility and independence demonstrated that nonhyperactive children had more structure than hyperactive children. For example, more nonhyperactive children had required chores and bedtime rules than did hyperactive children. It would appear that the hyperactive child is in need of a more structured and controlled environment.

Conclusions

The group of those items designed to elicit data related to hypotheses 1 through 6 failed to show significance. The null hypothesis is accepted for these hypotheses.

A significant relationship was found in 3 out of 60 items. They are as follows:

1. The sociological variable concerning the mother working full time following the birth of her child demonstrated significance. There was a statistical significance level of 0.03 in the relationship of mothers with hyperactive children not working compared to mothers of nonhyperactive children who did work.
2. A statistical significance of 0.03 was found with the same groups of mothers who worked full time during the child's preschool years (2-5 years). More mothers of nonhyperactive children worked than did mothers of hyperactive children.
3. Statistical significance level of 0.05 was demonstrated in the psychological variable concerning the child who confided in or was more attached to one parent. More hyperactive children were found to be attached to both parents in comparison to nonhyperactive children showing a preference for one parent.

The study found no significant relationship between the families of hyperactive children and the families of non-hyperactive children in the areas of:

1. Family structure and environment.
2. Child management and discipline.
3. Child responsibility and independence.

Recommendations

Based on these study results, it is recommended that:

1. This study be replicated using a larger sample and wider geographic population.
2. A similar study be made utilizing an instrument that incorporates factors determined in this research to affect relationships between the family and a hyperactive child.
3. Research be conducted to evaluate the relationship between the working mother and the hyperactive child.
4. A study of the interactions between the child and family be completed sequentially.
5. Research be carried out that will evaluate families with hyperactive children in different socioeconomic and ethnic groups.
6. Studies be made to evaluate the preference of one parent over the other parent by hyperactive and nonhyperactive children.

7. Research be conducted to evaluate the psychological status of the parents/families of hyperactive children.
8. Research be conducted to develop a psychological profile of the hyperactive child.
9. A study be made of the ability of a hyperactive child to adapt to his environment.
10. Research be conducted to develop and validate a standardized tool which identifies specific patterns of behavior in the home.
11. This study be replicated with both parents present for the interview.

APPENDIX A

SAMPLE QUESTIONNAIRE

PARENT QUESTIONNAIRE CHILD AND FAMILY INFORMATION FORM

Child's Name _____ Birthdate _____ Age _____

Address _____

Town, State, Zip Code _____

Length of time at present address: 6 months-under _____ 6 months-1 year _____
 1-3 years _____ 3 years-over _____

Length of time at previous address: 6 months-under _____ 6 months- 1 year _____
 1-3 years _____ 3 years-over _____

Place of Birth: Texas _____ Other state _____

Race: Caucasian _____ Negro _____ Mexican American _____
 Oriental _____ Other _____

Sex: Male _____ Female _____

Color of Hair: Blonde _____ Brown _____ Brunette _____ Red _____

Color of Eyes: Blue _____ Brown _____ Green _____ Other _____

Home phone: _____ Any other phone? Yes _____ No _____

School _____ School District _____

Grade: Kindergarten _____ First _____ Second _____ Third _____
 Fourth _____ Other _____

Child lives with: Natural Parents _____ Adoptive Parents _____
 Mother/Stepfather _____ Father/Stepmother _____
 Grandparents _____ Other _____

Person giving information: Mother _____ Father _____ Parents _____
 Grandparent _____ Other _____

Father:

Age: 18-under _____ 18-22 _____ 22-28 _____ 28-35 _____ 35-40 _____
 Over 40 _____

Employed: Yes _____ No _____

What type of work? Blue collar worker _____ White collar worker _____
Self-employed _____

Where? Houston _____ Other city _____

How long? 1 year-under _____ 1-3 years _____ 3-5 years _____
5 years-over _____

Education: Less than high school _____ High School _____
College-2 years _____ 4 years _____ Over _____ Technical _____

Is health good? Yes _____ No _____

Are there any present serious illnesses? Yes _____ No _____

Mother:

Age: 18-under _____ 18-22 _____ 22-28 _____ 28-35 _____ 35-40 _____
Over 40 _____

Employed? Yes _____ No _____

Fulltime work? Yes _____ No _____

How long at present job? 6 months-under _____ 1-3 years _____
3 years-over _____

Education Less than high school _____ High School _____
College-2 years _____ 4 years _____ Over _____
Technical _____

Is health good? Yes _____ No _____

Are there any present serious illnesses? Yes _____ No _____

Is either parent a step or adoptive parent? Yes _____ No _____

Are the natural parents: Married _____ Separated _____ Divorced _____
Widowed _____

If separated or divorced, how old was child? 1 year-under _____ 1-3 years _____

3-5 years _____ 5-7 years _____ 7-10 years _____

What is the order of this child in the family? 1st _____ 2nd _____ 3rd _____
4th _____

Do other relatives or persons live in your home? Yes _____ No _____

Circle the name of your religion: Catholic Protestant Jewish Other

Circle your salary range: \$6,000-under \$12,000-under \$25,000-under
\$25,000-\$50,000 \$50,000-over

APPENDIX B

SAMPLE INTERVIEW

Interview Questions

Child's Name _____

Age _____

Date _____

Temperament in the preschool years: Did your child at 2-5 years show the following:

1. Limited attention span or interest? Yes _____ No _____
2. Restlessness and distractibility? Yes _____ No _____
3. Frequent crying? Yes _____ No _____
4. Frequent temper tantrums? Yes _____ No _____
5. Destructiveness with toys? Yes _____ No _____

Medication and diet:

1. Is your child on medication? Yes _____ No _____

2. If on medication by whom was it recommended?

Physician _____ School _____ Other _____

3. For what length of time has he been on medication?

6 months-under _____ 6 months-1 year _____

1-3 years _____ 3-5 years _____ 5 years-over _____

4. Do you think the medication is helping? Yes _____ No _____

5. If yes, does it help: Behavior _____ Schoolwork _____
other? _____

6. Is your child on a special diet? Yes _____ No _____

7. If yes, what kind of diet? Feingold _____ No sugar _____

Protein _____ Other _____

8. For what length of time has he been on this diet?
 6 months-under _____ 6 months-1 year _____
 1-3 years _____ 3-5 years _____ 5 years-over _____
9. Who recommended this diet? Physician _____
 Family _____ Friend _____ Other _____
10. Do you think this diet is helping? Yes _____ No _____
11. If yes, does it help: Behavior _____ Schoolwork _____
 Other? _____

Family Information

1. Did you work after the child was born Yes _____ No _____
2. Fulltime work? Yes _____ No _____
3. Who cared for the child during work?
 Nursery or preschool _____ Babysitter _____
 Relative _____ Friend _____ Other _____
4. Did you work during preschool years (2-5 years)?
 Yes _____ No _____
5. Who cared for the child? Nursery or preschool _____
 Babysitter _____ Friend _____ Relative _____
 Other _____
6. Do you get a chance to go out without your child?
 Yes _____ No _____
7. If yes, how often in a month do you (parents) go out?
 once-month-under _____ 1-3 times/month _____
 3-5 times/month _____ 5-8 times/month _____
 8 times-more/month _____

8. Is his behavior better when you leave him with someone else? Yes _____ No _____
9. Does he have friends? Yes _____ No _____
10. Are the friends the same age as your child? Yes _____
No _____
11. If no, are they younger? _____ Older? _____
12. Who outside the family does he relate well to? Friend _____
Relative _____ Neighbor _____ Other _____
No one _____
13. Is he attached to a particular sibling? Yes _____ No _____
14. Is he jealous of a particular sibling? Yes _____ No _____
15. Is he more irritable at a particular time of the day?
Yes _____ No _____
16. If yes, at what time of day?
7-8 am _____ 3-4 pm _____ 4-6 pm _____
6-9 pm _____
17. Does he have chores to do around the house? Yes _____
No _____
18. Does he get an allowance for doing these chores? Yes _____
No _____
19. Does he need to be nagged to do things? Yes _____ No _____
20. Do you allow him to go alone to school? Yes _____ No _____
21. Do you allow him to go places other than school alone?
Yes _____ No _____
22. Does he go alone to school? Yes _____ No _____

23. Does he go alone to these places? Yes _____ No _____
24. Is he allowed to choose his own clothing in the morning?
Yes _____ No _____
25. Does he choose his own clothing? Yes _____ No _____
26. Does he get up and get dressed without prodding?
Yes _____ No _____
27. Does he have a bedtime? Yes _____ No _____
28. Does he go to bed without prodding? Yes _____ No _____
29. Does your child confide in or is he more attached to
either parent? Yes _____ No _____
30. If yes, which parent? Mother _____ Father _____
31. Does either parent spend more time working with him or
doing fun things together? Yes _____ No _____
32. If yes, which parent? Mother _____ Father _____
33. Is the time spent with your child fun and enjoyable?
Yes _____ No _____
34. Does the family do activities together? Yes _____
No _____
35. If yes, how often a month? Once/month-under _____
1-3 times/month _____ 3-5 times/month _____
5-8 times/month _____ 8 times-more _____
36. Does either parent discipline the child? Yes _____
No _____
37. If yes, which parent? Mother _____ Father _____
Both _____

38. What methods are used to discipline him? Spanking _____
Isolation _____ Restricting privileges _____
Other _____
39. Is this method effective? Yes _____ No _____
40. Does he have learning problems in school? Yes _____
No _____
41. Does he have behavior problems in school? Yes _____
No _____

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