THE INFLUENCE OF THE PRESENCE OF INTELLECTUALLY
HANDICAPPED SIBLINGS ON THE DEVELOPMENT OF
EMPATHY IN CHILDREN

by
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of the University of Maryland in partial fulfillment
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APPROVAL SHEET

Title of Thesis: The Influence of the Presence of Intellectually Handicapped Siblings on the Development of Empathy in Children

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ABSTRACT

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Edward A. Feinberg, Doctor of Philosophy, 1982

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The major purpose of this study was to determine if a relationship exists between the development of empathy and the presence of a handicapped sibling among children. The siblings of the handicapped children were between four and one half and eight and one half years of age.

The Feshbach-Roe Affective Situations Test was individually administered to 60 siblings of handicapped and nonhandicapped children. The handicapped children were younger siblings of those tested. These handicapped children ranged in age from 12 months to three and one half years.

The results indicated that there is no statistically significant difference in overall empathy between children with younger handicapped and younger nonhandicapped siblings. Stepwise discriminant analysis did, however, reveal that there is a differential pattern among individual empathy variables for the two groups. For the total group (p < .028) it was revealed that siblings of the handicapped expressed less empathy toward happy scenarios and more empathy toward fearful
scenarios. For children > 7 years (p < .001) siblings of the handicapped expressed more empathy in situations depicting fear and anger and less empathy toward sad situations.

The use of the Feshbach-Roe Affective Situations Test was supplemented by interviews with six of the siblings. The interviews added clinical insights that were usually in accord with the implications of the statistical findings.

Explanations for the profile of the statistical and clinical results are offered. The possible ramifications of the results are discussed and future research directions are recommended.
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CHAPTER I

Provision of services to handicapped children has increased markedly in recent years. Ever earlier identification of children with special needs has been coupled with a proliferation of special education programs throughout the country. Federal legislation has mandated services to children beginning at age three and five states surpass the commencement age of educational intervention by requiring service availability as soon after birth as diagnosis can be made (Gliedman and Roth, 1980).

The demand for services by such organizations as the Association for Retarded Citizens, the increased life expectancy through neonatal intervention among children who heretofore would have not survived beyond infancy, the well publicized neglect that has occurred at state institutions for the retarded and the increased militancy among the retarded themselves have contributed to a veritable revolution in programs available for handicapped persons (Kleinfeld, 1980). The passage of Public Law 94-142 crystalized the federal commitment to ensuring a "free and appropriate education" to all children with special needs. This Public Law has already been compared in its significance for the education of the handicapped as Brown v. Board of Education has been to school desegregation (Gliedman and Roth, 1980).

The ramifications of this general policy will be felt for decades to come. The most obvious impact will be in the continuing reassessment of the intellectual, social and self-care capabilities of the
handicapped. The concentration of interest on early childhood programs will expand to include older children and adults as the first generation to enjoy the fruits of this legislation grows to maturity. Interest in such relatively recent innovations as adult group homes will increase as persons with disabilities that would have prohibited any thought of independent living a decade ago attempt to live on their own.

Educational strategies will be continually refined as researchers begin to compare the long-term effects of various programs and curricula. Conventional assumptions of intellectual potential will be revised as children who were previously confined to institutions are given ever greater encouragement to live in regular society.

The impact of this societal commitment will not simply be on the manner in which handicapped children are educated and housed. A less quantifiable but equally important effect will be on the multi-faceted impact that this will have for the family of the handicapped child. How the family integrates this child into the family constellation and how each member defines his role vis-à-vis the handicapped child is of enormous significance for the mental health of the handicapped child, the parents and the siblings.

A review of related literature reveals an evolution of attitude concerning intervention for retarded children as well as expectations regarding developmental possibilities. The literature will be highlighted by first discussing studies that have been conducted with parents of handicapped children and then looking at investigations that have focused on siblings of handicapped children. Finally, forces that shape the emergence of empathy in children will be presented.
THE INFLUENCE ON PARENTS OF HAVING A HANDICAPPED CHILD

There have been few attempts to study the handicapped child and his family in a psychosocial context. Issues of maternal guilt, anger and marital disintegration have been investigated (Sagers, 1973). But there has been little emphasis on analyzing the long-term consequences of having a handicapped child on the family. The literature that does exist is replete with case studies of mothers whose guilt, anger and despair have had a deleterious effect on their own mental health and the emotional climate of the home (Baum, 1962). Farber (1960, 1963, 1968) has presented an alternative view of the impact of the handicapped child on parents. He has posited the idea of the "integrated family" and discussed how the handicapped child influences marital integration. A third concentration has been on long-term coping mechanisms used by parents.

Psychiatric Approach

San Martino and Newman (1974) present a typical psychiatric case study. They describe a situation in which there is the presumption that the birth of the handicapped child had a devastating impact on what would have presumably been a happy family. They warn that the presence of a handicapped child has an almost inevitable domino impact on the rest of the family. In their view there is a pervasive sense of guilt among all family members, excessive parental attention to the retarded child, neglect of the normal child and a mixture of resentment and guilt by the normal child that leads to "anxiety over the meaning of retardation and the relationship to his [the normal child's] own sexual and aggressive fantasies." Though their clinical conclusions are based on
data from a small and unrepresentative sample, the message echoes through the literature.

Poznanski (1969) presents two cases of school aged children afflicted with psychiatric disabilities that are, presumably, linked to the presence of the retarded child in the home. Again, the mother is perceived as poorly balancing the demands of the handicapped child and the normal child. Her presumed over-involvement with the former breeds emotional turmoil in the normal child. This, of course, only exacerbates maternal guilt. Poznanski rather weakly recommends that pediatricians take a more active role in identifying potential emotional difficulties among all family members.

Since institutionalization for even higher functioning retarded children was accepted for so long, few studies exist before 1960 that focus on the phenomenon of the retarded child at home. One of the first investigations conducted was undertaken by Schonell and Watts in Australia in the mid-1950s.

Schonell and Watts (1956) studied urban, suburban and rural families whose retarded children were of varying ages. At the time of the investigation there were no community facilities to provide special schooling, respite care or family counseling to the families of handicapped children. Families had generally been informed near the time of birth that their children were hopelessly handicapped and that the provision of a benign home environment would be suitable if institutionalization was not selected.

Most of the families studied had little or no information on the nature and cause of the handicap. They ascribed a host of irrational and fantastic reasons to their child's affliction—ranging from divine
punishment for their own past behavior to deviant sexual acts at the
time of conception. Since there was no scientific explanation to combat
superstition, families persisted in feelings of guilt, fear and
mysteriously justifiable retribution as explanations for the presence of
this child in their homes.

The study concentrated on interview questions that asked only how
the child's presence superficially intruded on the family's daily
routine. They concluded that the following are the most frequently
discussed impacts: effect on mother's shopping arrangements; effect on
visits to other people's homes; effect on family dining arrangements;
and effect on family holidays.

In discussing the impact the handicapped child has had on the other
children, Schonell and Watts write that 26% of the mothers reported that
their normal children complained of adverse comments having been made at
school about their subnormal siblings. The authors write, "This
represents another facet of the all-pervading effect that the subnormal
child has upon his family."

Schonell and Watts decry the lack of day care facilities to assist
the beleaguered mother. They also mention that family isolation from a
support network of other families experiencing similar problems, the
susceptibility to quack remedies as parents search for miracle cures and
the confusion over the child's care after the parents' death are factors
in family adjustment.

Farber's "Integrated Family" Theory

Farber (1959) moves away from narrowly viewing the family of the
handicapped child in restrictive psychiatric categories. He is among
the first researchers to address the need to place the handicapped child
in a family context. Farber advances the notion of the "integrated family" that consists of two factors--a consensus of members as to domestic values and a lack of role tension in the interpersonal relations between family members.

In contemporary self-actualizing American society Farber writes that the idea of the integrated family has very distinct sequential stages. The normal life cycle consists of: the married couple; the family whose youngest child is of pre-school age; the family with a preadolescent youngest child; the family with an adolescent young child; the family in which all children are adults; the family in which all children are married.

In Farber's schema the major alteration that occurs in the family of a mentally handicapped child is the arresting of this expected sequence. Emotional disequilibrium occurs as family members, particularly parents, struggle with the increasing clash between the expected pattern and the reality of their situation. The presumption of their children's eventual independence must be modified as family members recognize that the handicapped child will prohibit the family from experiencing the increased independence implicit in each stage of development. Farber (1963) writes, "With respect to their normal children, ideally, parents continually redefine their roles, obligations and values to adjust to the changing role of the child. With respect to their retarded children, the parental role is fairly constant. Regardless of his birth order in the family, the mentally retarded child eventually remains a young child socially."

Farber's (1958) landmark study consisted of 240 families in metropolitan Chicago that had one child with an IQ of 50 or below. He
studied the impact on marital integration and sibling role tension of having a retarded child at home. Marital integration was evaluated by administering a battery of predictive integration instruments that attempted to assess the state of the marriage prior to the birth of the handicapped child. Evaluative tools were also given to estimate the degree of integration at the time of the study.

Farber found that early marital integration has a positive correlation with integration after the birth of the retarded child. It was also discovered that social, religious and extended family influences were operative in the family's adjustment. These influences were particularly apparent in the differential family reaction to the sex of the handicapped child and the sex of the sibling.

A breakdown of Farber's data by social class revealed that the presence of a retarded boy in lower class families had a more acute effect on the parents' marriage than the presence of a retarded girl. With sex role expectations more pronounced in this environment hope of vicarious achievement for parents through their sometimes exclusive male offspring could not be transferred to their daughters. Farber concluded that institutionalization of the retarded son could restore a sense of harmony to the marriage. While the retarded daughter was received with a sense of pity and eventually assumed a freakishly extreme version of the female role stereotype of passivity and dependency, the growing retarded male became increasingly disruptive to the marriage.

The interaction of sex and social class was an important component of Farber's study. It was the first recognition in the literature that response to a retarded child could go beyond a non-specific feeling of guilt, anger and frustration.
Farber also studied religious affiliation and extended family relationships. With regard to religious affiliation, he noted that practicing Catholics tended to have more positive feelings toward their retarded child than any other religious group. Positive extended family relations also seemed to be of importance in promoting healthy integration.

Fowle (1964) extended Farber's study to a predominantly Protestant California setting. She studied two groups of 35 families that were matched on socioeconomic status, birth order of the handicapped child, ethnic background of the family and geographic location of the family dwelling in relation to the central city. The variable under investigation was the degree of marital integration for the first group which had institutionalized their retarded child and the second group which had retained the child in the home. The first group was further subdivided by parents who had placed their child in a residential setting less than two years before the time of the study and those who had placed their child more than two years at the time of the investigation.

Fowle found that there was no significant difference in the marital integration scores of the two groups. In comparing Fowle's conclusions with those of Farber the main population distinctions between the groups with retarded children at home included the greater concentration of lower class urban Catholics in Farber's study as compared to suburban Protestants in Fowle's investigation. It should be noted that in the California study a community day care facility was available to all retarded children who were reared at home. A byproduct of such a
facility might be the positive influence of the time that is made available to the mother in the course of the day.

Caldwell and Guze (1960) also studied marital integration among couples who had chosen to institutionalize their retarded child versus those who kept the child at home. They used a smaller sample (N = 25) and had more open-ended questions that were administered only to mothers. A separate section was administered to siblings.

The authors employed five assessment tools—a 45 minute psychiatric interview, the Cornell Medical Index, the Family Attitude Scale, the Parental Attitude Research Instrument (PARI) and the Attitude Research Supplement. The PARI is broken down into 23 subscales that are supposed to be correlated with certain maternal and paternal roles. This was the only scale that Caldwell and Guze used in which they expected to observe a statistical difference between groups.

They hypothesized that mothers of institutionalized children would score higher on factors of Suppression and Interpersonal Distance, Hostile Rejection of the Homemaking Role, and Harsh Punitive Control. It was also expected that they would score higher on decisiveness of attitudes.

Results indicated that there were no significant differences among any of the scales or among raters on the various psychiatric and medical scales. The authors could find no difference in the child rearing pattern of either group. They do write, "The interviewers were impressed by the nearly universal courage, strength and adaptability of these mothers. There was the general impression that as a result of their experience nearly all of the women were more sensitive and sympathetic to people with all kinds of problems and handicaps."
Long-Term Parental Coping Mechanisms

The theme of guilt, exacerbated by lack of explanation of etiology and availability of follow-up counseling services, can be prolonged. Sagers (1974) discusses studies that indicate sustained guilt and an inability to discuss the personal impact of a Down's Syndrome child 15 years after the child's birth. Other studies discussed by Sagers found shame, embarrassment, rejection and helplessness as principal and sustained reactions. One investigation did conclude that guilt was lessened when convincing explanations were made available.

The construct of depression and guilt among parents of handicapped children poses a problem in assessing when this should be considered abnormal or unreasonable. Virtually all researchers agree that some form of disappointment is a normal reaction after the child's birth. Olshansky (1962) even writes that if feelings of depression are absent then the parents' defenses may be pathological. Slutsky (1969) and Tisza and Gumpertz (1962) note that feelings of shock, disappointment and helplessness are expected. Parents have to deal immediately with the loss of the idealized child that they had nurtured in their imagination. Roos (1963) writes that parents may become preoccupied with existential questions on the meaning of life and death as they begin to become aware of the fact that they will not participate in what had been considered an essentially inevitable life cycle sequence.

Many of the researchers who reiterated feelings of guilt as primary reactions studied parents of young children. The parents were still undergoing the initial adjustments of response to the child and as Roos (1963) writes, still responding more to the abstraction rather than the
later reality of their child's retardation. A more accurate description of parental adjustment was probably portrayed by Olshansky (1962) who discussed "chronic sorrow" as an often life-long reaction. The chronic sorrow may indicate an ability to successfully integrate the child into the family constellation, but with the persistence of regret at the child's condition. This sorrow is not so debilitating that it affects the family's daily functioning. It may mean, however, that there is a continuous undercurrent of misfortune which is periodically intensified. The intensification is particularly prevalent when other family members or their friends are experiencing life cycle events or during family gatherings when developmental comparisons with other children are inescapable.

Wolfensberger (1967) recognized that there is infrequent attention paid to the timing when parents are interviewed on their response to their handicapped child. He hypothesized that there are three separate periods that are experienced by most parents. The first is "novelty shock" and is characterized by disbelief and distancing from the consequences of the diagnosis. Often insufficient information is given to parents by hospital personnel who feel inadequate in discussing this with the family. The parent is quite unsure about just what he is supposed to accept. The author cites an example of a father who hadn't been adequately told about his child's mongoloid condition and simply assumed that it is an anomaly similar to that of a mongrel dog.

Wolfensberger's second stage is described as "Value Crisis" and it is here that the mixture of guilt, frustration and the destruction of the expected sequence of family development occurs. The family gropes for explanation and each parent may recall images of people they had
known or abstractions they have maintained of retarded people. The
focus at this stage is not as much on the reality of the actual retarded
child as it is on the idea of the retarded child. Visions are formed
and causes are ascribed that may never be broken.

Begab (1971), commenting on this stage, writes that "Guilt
producing experiences are stored up and the stimulus of a retarded
child's birth calls into consciousness these experiences on a level more
imagined than real but resulting in feelings more real than imagined."
At this stage the parent may desperately search for miracle cures, go
doctor shopping, alternately reject and engage in despair at the
diagnosis and begin to tentatively understand and accept the
implications of the child's handicap.

"Reality crisis" is Wolfsenberger's third stage. It is here that
the child becomes fully integrated and that the parents learn to accept
the fact that the child's condition will not improve. One of the
author's criticisms of service delivery to the retarded is that
community intervention is generally unavailable at this point when the
family is soberly reappraising their aspirations for the child.

In summary, it is noteworthy to observe that relatively little
attention has been devoted to studying the influence that the
handicapped child has on the family. The investigations that have been
conducted can be classified into three general categories: those that
employ a traditional psychiatric case study approach; those that have
been conducted by Farber and concentrate on how the handicapped child
influence the idea of the "integrated family"; and those that analyze
the sequences of parental responses. The psychiatric approach typically
views the influence of the handicapped child on the family as
disastrous. Case studies are presented to illustrate the emotional disequilibrium that all family members experience. The second approach, Farber's "integrated family" idea, attempts to incorporate the psycho-social context of the family into consideration of how the child is received by parents. Such notions as number of other siblings, sex of the child, birth order and socioeconomic status are explored. The third approach in this area focuses on long-term parental coping mechanisms. The stages of parental response are the focus of inquiry by researchers in this aspect of investigation.

THE INFLUENCE ON SIBLINGS OF HAVING A RETARDED CHILD IN THE FAMILY

While there has been relatively little research attention paid to the effects of the retarded child on his parents, there has been even less attention to the impact on siblings. Of course there is no single impact on siblings that has been thoroughly studied or that can be completely isolated. As with so much of investigatory work in the social sciences, there is a host of factors that can't be entirely controlled. In assessing the influence of the handicapped child on the family, the response of parents and extended family to the child is obviously of major importance. Parents can assist in setting the tone for the degree to which the handicapped child becomes integrated into the family. Yet the idiosyncracies of the particular family's situation—number of other siblings, sex of sibling and sex of subject, birth order of the handicapped child, extent of community support system, family financial resources, parental expectations for their childrens' achievement, subtle religious and ethnic influences—can alter the manner in which siblings receive their handicapped brother or sister.
It is not just the complexity of the task that has led to such limited research efforts. It is an almost intuitive conviction among clinicians that the presence of disequilibrium in the pattern of family development outlined by Farber (1959) is disruptive to the mental health of all other family members (San Martino, 1974). It is the presumed adverse impact on the other children that leads the clinician to counsel parents to seek institutionalization for their handicapped child.

The research that has been conducted, however, does not yield compelling results in any particular direction. It cannot be said that there is a demonstrably adverse, neutral or positive reaction. There has not been a clear focus of concentration among the studies that have been conducted on the impact of a handicapped child on siblings. As with investigations that have been directed to parents of handicapped children, there is a psychiatric school of thought. Farber has also discussed "sibling role tension" which he conceived as a corollary to his theory of the integrated family. Another source of investigation is a series of studies that investigate a spectrum of variables and feelings among adolescent siblings of the handicapped. These studies suggest that siblings of the handicapped may possess a greater degree of empathy as a result of this experience.

**Psychiatric Approach**

San Martino and Newman (1974) present the traditional view that parental obsession with guilt over the birth of a retarded child contaminates their relationship with their normal children. They write, "In most families in which there is a defective member, pervasive guilt permeates the family and is expressed in its characteristic style. The birth of a retarded child, his presence in the home and even the
knowledge that such a child once lived at home, greatly exacerbates this existential guilt." They write that through the mechanisms of introjection and identification the normal child can take on the characteristics of the retarded sibling which serves to decrease the degree of anxiety and guilt that the normal child would experience.

San Martino and Newman (1974) report several disturbing case studies which illustrate their feeling of virtually inevitable family tragedy at the existence of a retarded child. All the siblings are perceived to be in need of intensive play therapy in order to act out their feelings of hostility toward the retarded child. The retarded child is given excessive attention at the other child's expense due to guilt and anxiety. Assistance is sought for one boy because of suicide threats and accusations that he was being poisoned by the father. Another boy is, in the view of the authors, withdrawn and depressed over the institutionalization of his sister. In this latter case the family has apparently made the child feel guilty over his own normality. In order to deal with this anxiety he seeks to engage in a developmental regression so that he will manifest the same behaviors as his sister.

Trevino (1979) presents a case study of a sister of an adolescent girl with a seizure disorder. Parental demand that the normal sister assume a surrogate mother role becomes so confusing that the sister experiences severe emotional stress, culminating in the need for intensive, long-term therapy.

The writings of San Martino and Newman (1974) and others who share their philosophical convictions present a bleak outlook for the siblings of the handicapped.
Farber's "Sibling Role Tension" Theory

Farber (1959), who studied the idea of marital integration, also advanced the notion of sibling role tension among siblings of retarded children. Role tension was defined as the "extent to which two persons may develop roles which are inconsistent with one another or in meeting critical events."

Farber interviewed 69 parents in a Chicago suburb. Since parents were contacted through a Catholic parent group concerned with the mentally retarded the majority of families had at least one Catholic parent. Farber acknowledged that this limited the generalizability of his results. The normal children in the sample ranged in age from six to 15. He administered extensive questionnaires to each family and conducted two hour interviews to determine the degree of role tension and the magnitude of impact on the normal children.

Farber had several conclusions from the analysis of his data. First, it appeared that sibling adjustment to the retarded child was unaffected by the family's socioeconomic status. Secondly, the chief variable in parents' perception of how the normal child adjusted to the handicapped child revolved around the degree of the retarded child's dependency on the rest of the family. If there were few community resources to which parents availed themselves and if the parents permitted the handicapped child to prevent the family from engaging in normal family activities, then the handicapped child was seen as an annoyance.

Some of the siblings interviewed complained of the centrality of the handicapped child in the life of the family. Family plans had to constantly account for the special needs of the handicapped child,
particularly if the child were also orthopedically handicapped. Adolescents frequently stated that this centrality seemed to increase as the retarded child grew older. If the retarded child were the youngest member of the family then his delayed early development was only viewed as an acceptably prolonged baby phase. But as he reached school age and the disparity between his physical and cognitive development became more striking, the older sibling became increasingly aware of the extent of the retardation. It was at this point that excessive family dependency on this child's needs became resented. Number of other siblings in the family can also have an impact here. As Trevino (1979) writes, "An atmosphere of normalcy increases with the number of normal siblings... Although not particularly logical, a common reaction of siblings, especially a single sibling of an afflicted child, is a feeling of guilt for having been born normal."

The third conclusion is discussed by other researchers and is a recurrent source of controversy in the literature. Farber found that the only sibling consistently adversely affected by the retarded child is the eldest sister. These girls had generally assumed a prominent role in the care of the handicapped child and in housework chores. The paucity of community assistance gave the mother little respite from total involvement with the handicapped child and the eldest daughter frequently became a surrogate mother to this child. According to many of the parents in the study, when institutionalization was considered, it was done in order to alleviate the stress on the daughter. Parents also expressed feelings that the daughter had an obligation to assist the mother in this role.
The social context of this study is of obvious importance since sex role perceptions depend greatly on socioeconomic status as well as religious and ethnic affiliations. The theme of the beleaguered eldest daughter is addressed by researchers in the field.

Fowle (1964) used Farber's idea of sibling role tension in comparing children between six and 17 with retarded siblings who had been institutionalized versus those who had remained at home. Her research, conducted in central California, sought to determine if there was a difference in overall adjustment of children in these two groups. She also investigated whether the impact was different for males and females.

A matched sample of 35 children with institutionalized siblings and 35 children with retarded siblings living at home was used. Each group consisted of 20 male and 15 female siblings. The retardates of the institutionalized group had been in residential care within five years before the time of the study; the retardates in the at-home group were enrolled in community day facilities.

In comparing the results of the at-home group and institutionalized group, Fowle found that the former group exhibited significantly higher role tension than the latter. The data was further analyzed and it was determined that the oldest female sibling in the experimental group displayed significantly higher role tension than the oldest female sibling in the at-home group. A comparison of the oldest male siblings in each group did not yield significant differences. Once again, it appeared that the oldest female sibling experienced the greatest dislocation when a handicapped sibling lived at home.
Of course there can only be speculation as to the nature of the oldest female's sense of stress. The probability of additional domestic duties is discussed by Fowle. Although community day facilities were utilized by the at-home group, there is no indication as to how long these facilities had been available, how many hours per day the mother was freed from caring for the child and what duties the oldest female was expected to perform.

Gath (1973) is the only researcher in this field of inquiry whose investigation on the impact of having a handicapped sibling is exclusively focused on the differential effects for males and females. Studying the elementary and secondary siblings of 174 Down's Syndrome children in Great Britain, Gath administered the Rutter Behaviour Questionnaire to identified teachers and parents to assess the relationship between deviant behavior, social and family background, and the presence of a handicapped child.

Since the Rutter Behaviour Questionnaire had been intended to measure pre-delinquent and delinquent characteristics, Gath expected that boys would obtain higher deviancy ratings than girls. The previous research conducted with this scale and research on delinquency in general has yielded higher deviancy ratings for boys.

Gath reviewed her data in relation to family size, birth order of sibling, birth order of retarded child, social class, maternal age and age of siblings in relation to handicapped child. While boys were rated as more deviant than girls, there was no significant correlation for male deviancy on any one of the dimensions that were analyzed.

The proportion of deviant boys was higher than for girls in all categories with the exception of the eldest sister. Thirty three
percent of the 19 first born girls were rated as deviant as compared with 16 percent of middle born sisters. Older brothers were rated as deviant as frequently as younger brothers. The high rate of first born female deviancy had no correlation with any of the other factors studied.

Gath writes that the centrality of the handicapped child in the life of the eldest sister robs her of the opportunity to participate in normal development. The assumption of a mother surrogate role has a deleterious effect on the mental health of the eldest sister. Trevino (1979) cautions counselors to be aware of the "golden hearted" sister, "the one who established a maternal relationship with the afflicted child, a relationship that the family accepts all too easily."

The majority of studies investigating the influence of a retarded child on the normal sibling do not control for sex of sibling. Caldwell and Guze (1960) studied parents and siblings. They selected older elementary and secondary school siblings of normal and retarded children. The two groups were matched on the basis of age, sex, level of retardation of the sibling and ordinal position in the family.

Caldwell and Guze administered the Stanford-Binet vocabulary subtest, the Children's Manifest Anxiety Scale and a structured clinical interview to determine if there were differences between the two groups. The interview included such questions as to when the sibling first noticed that there was something different about his brother or sister; the quality of parental explanations; the manner in which the sibling deals with the inquiries of friends; preferences for home or institutional care; and general state of the sibling's family life.
Analysis of the authors' psychometric data revealed no significant difference in the intellectual level or anxiety levels between the two groups. Caldwell and Guze were impressed with the degree of empathy that was exhibited by the siblings of retardates living at home. While they had expected to detect feelings of parental inattention and resentment toward the handicapped sibling among the at-home group, they found that most of the children had positive feelings toward their handicapped brother or sister. They write, "Many of the children commented that, as a result of their own personal experience with the problem, they were now more understanding of the problems of all retarded children and of people with other kinds of difficulties. Several expressed the conviction that family cohesiveness had been increased as a result of the presence of the retarded child in the family. . . Also frequently mentioned was an increased appreciation of religious values." While they were minimized, the adverse effects that were discussed included additional medical expenses, explanations to friends and extra work for the mother.

General agreement with the conclusions of Caldwell and Guze was found by Graliker, Fishler and Koch (1962) in their study of 21 teenage siblings of retarded children. In this study, adolescent members of families who were in the process of participating in a longitudinal study on the effects of retarded children on family life were asked to take part in an investigation on their adjustment to the retarded child. The population was located in Los Angeles, composed of essentially middle income families in which the retarded child was the youngest member in the family. The majority of the retarded children were
diagnosed as having Down's Syndrome and were all living at home at the
time of the study. The average age of the retardate was five years.

The investigation was conducted entirely in interview form and
exclusively with the adolescent. With the exception of a preliminary
screening assessment to ensure that the adolescents were functioning
within at least normal intellectual limits, no standardized measurements
were used. Interviewers developed a zero to five rating to evaluate
maladjustment to adjustment in certain areas of inquiry. The interview
focused on four areas: description of the adolescent; relationships in
the home; relationship to the handicapped sibling; family plans for the
retarded sibling. Main areas of interviewer concern were the intra-
family adjustment and the adolescents' attitude toward the retarded
sibling.

The authors' found that most of the adolescents had adjusted
exceedingly well to the handicapped sibling. The intra-family strife
that was present revolved around typical adolescent-parent conflicts.
Graliker, et. al. write that they were impressed with the general
sensitivity and compassion exhibited by the subjects of their
interviews. They note that most of the adolescents discussed their
willingness to assist with household chores and the need to evaluate
each person on his or her own merits. No mention is made of a
differential impact on males or females.

The authors' acknowledge that the size of their sample \( (N = 21) \) and
the lack of statistically reliable measurements make conclusions only
tentative. They take issue with Farber's study, objecting to his use of
interviews with the mother in determining sibling role tension. They
maintain that maternal perception and the actual feelings of the
adolescents may be quite different. The authors write that another factor in the positive adjustment of the adolescents was the availability of family counseling for participants in the longitudinal study. Counseling services were stressed during the first year of the handicapped child's life. Assistance in enabling the parent to understand the implications of the diagnosis could have a beneficial spill-over effect to the normal sibling. They write, "It is our impression that teenagers generally reflect the attitude of the parents in relation to the problem of mental retardation and in turn the parental attitude and method of handling the situation reflects the kind of professional advice and counseling available to the parents."

_Siblings of the Handicapped and the Experience of Empathy_

Bernard (1974) studied 50 families with a severely retarded child and 50 families with a non-handicapped child in Cincinatti. He administered the Sibling Role Tension Index and two additional measurements—the Neighborhoodness Scale and a scale measuring magnitude of religious affiliation. Average age of the retardate was 11½ years and all were living at home. Bernard advanced the notion that there would be an inverse relationship between sibling role tension and community involvement. Isolation from the mainstream of the community was hypothesized to be a cause of family disharmony. The presence of a handicapped child, according to Bernard, strains family roles and overburdens each family member. He criticized Farber's research for failing to account for the degree of community support that could have an effect on deceleration of family stress.

Like Farber, Bernard administered questions concerning sibling role tension to the parents of the siblings under study. As part of a one
hour interview that included discussion of marital integration, Bernard attempted to measure how family cohesion was influenced by participation in community activities. He found that families which had a high participation rate prior to the birth of the retarded child generally retained high community involvement. There was no significant difference in sibling role tension for families with high community involvement when a retarded child was present or not present in the home. There was a tendency for the non-handicapped sibling in families that were isolated in the community to have greater role tension than in families with only normal children. There was no sex difference in role tension, nor was birth order controlled.

Bernard did find that siblings of handicapped children, according to parental report, had higher rates of religious affiliation and neighborliness than children without a handicapped sibling. He noted that many of the parents said that the retarded child had a profound impact on the tone of the household. The frequency of doctor visits and other events that were undertaken for this child had helped create an unusually serious atmosphere in the home. Parents remarked that their normal children were more aware of the range of problems and illnesses that people experienced. There was a mixture of concern for the early loss of childhood innocence and admiration for the maturity that the children had gained. Bernard's conclusions were in agreement with Farber (1972) who, in another study, found that "siblings who interact with a retarded brother or sister are more serious in outlook on life, and place emphasis on life goals and devotion to a worthwhile cause."

In another study Gath (1972) compared the impact on preadolescent males and females with younger Downs Syndrome, cleft lip and/or palate,
and nonhandicapped siblings. Administration of the Rutter questionnaire as well as teacher and parent interviews revealed no differences among behavioral disturbance for these three age groups. Gath had expected that there would be a correlation between severity of handicap and degree of sibling disturbance. She writes, "That the siblings of Down's Syndrome children did not show greater disturbance calls for explanation. On the available evidence it can only be speculated that affected families were able to develop ways of adapting to the problems arising from the birth and development of an abnormal child. Sharing of these problems may have led to a greater sense of purpose and cohesiveness in the family." Gath (1974) expands on this theme in an additional investigation.

A study that attempted to compare the personality traits of siblings with mentally retarded institutionalized persons, siblings of mentally retarded persons living at home and persons without a mentally retarded sibling was undertaken by Sagers (1973). Studying adolescents between the ages of 12 and 17, Sagers investigated the relationship between degree of retardation, age of sibling and residence of the retardate. He used the Tennessee Self Concept Scale to assess all subjects and compared subjects in the areas of Identity; Self Satisfaction; Behavior; Physical Self; Moral-Ethical Self; Personal Self; Family Self and Social Self.

Sagers found that the only scales which discriminated among all three groups were the Behavior and Personal Self Categories. In these areas, the higher scores were achieved among adolescents who had a handicapped sibling. According to the Tennessee Self Concept Scale the Behavior category is defined as "measuring the individuals' perception
of his own personal behavior or the way he functions" and Personal Self is defined as a measurement of "the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationship to others."

Adolescents who had the highest self-concepts tended to have more mildly involved siblings and were at the older age level.

Sagers concludes that his findings revealed that, in comparison with adolescents who had normal brothers and sisters, there were no deleterious effects on personality for adolescents with a handicapped sibling. There did appear to be higher self concept scores for two categories and these were uninfluenced by place of the retarded child's residence or sex of the sibling.

The most ambitious and complex study of the impact on siblings of having a handicapped brother or sister was undertaken by Grossman (1972). Intrigued by the dearth of literature in this area, she studied 100 male and female college student siblings of retarded individuals. Her population was divided by social class (primarily upper middle and lower middle), birth order of subject and handicapped sibling, family size, sex of subject and sex of sibling, and religious affiliation.

Grossman and her team of assistants conducted extensive interviews and administered projective tests to determine the interplay of parental and extended family acceptance, availability of financial resources to ease the daily care burden, existence of community facilities, manifestations of parental guilt and family achievement orientation. Grossman contended that only a psychosocial approach to this field could yield results that would provide information on the full implications of this phenomenon.
Despite her attempt to subdivide her population, Grossman admits that quantification of all variables that make up her investigation is impossible. The socioeconomic status distinction, for example, was heightened by studying students who attended Ivy League schools versus those who were enrolled in community colleges. Grossman admits that there is more than simply class delineation between the two populations. Family intellectual expectations, emphasis on individual self-actualization and ability to secure domestic assistance were among the many additional distinctions that typically characterized the two populations.

Grossman's results are equivocal. She found that the older sister was not necessarily as burdened as previous research has suggested. Among upper middle class families, girls may have had more contact with the younger retarded sibling but this appeared more because of imitation of the maternal role than serving as forced mother surrogate. Family expectations for their daughter's achievement played a large role in the assumption that was made for the degree of the daughter's involvement. Some lower middle class families did expect the daughter to assume a large portion of domestic responsibilities. Yet this was complicated by the family's vicarious achievement drive, the existence or non-existence of male offspring to fulfill this achievement drive, the availability of community facilities and respite care services and the family's view on the changing role of women.

Grossman discusses the differences in the nature of the family's acceptance of the retarded child and how this relates to cultural and social distinctions. She also presents a comprehensive portrait of her subjects and attempts to determine if there are shared perceptions among
the siblings that transcend particular social context. In a discussion
on the coping-effectiveness scale that she used, Grossman writes that
"one of the most impressive general findings is the extent to which we
judged some students to have benefited rather than being harmed by the
experience of growing up with a retarded brother or sister."

Benefits included, "a greater understanding of people, more
tolerance of people in general and handicaps in particular, more
compassion, more sensitivity to prejudice and its consequences, more
appreciation of their own good health and intelligence than many of
their peers who had not had this experiences, as well as a sense that
the experience had drawn the family closer together."

Grossman quotes several students from varied backgrounds who
discussed how their retarded sibling had influenced their lives. One
young woman said, "I don’t think I would ever have gone into Special
Education [had it not been for her retarded sibling] ... Just trying
to help out all those other people--parents, who don’t know what to do
with their kids--is very satisfying. And I'm sure that I've influenced
a lot of my friends. I've convinced a lot of people to try it and see."

Grossman also discusses the harmful effects of families that become
overly consumed by the needs of the retarded child and financially
depleted by medical expenses. Nevertheless, an appreciation for human
differences and the development of a more serious outlook on life seemed
to be pervasive.

This theme is noted by Murphy, et. al. (1976) in their report on
group meetings with siblings of Downs Syndrome children. They added a
sibling component to their developmental stimulation project. The
program was designed to acquaint siblings with information concerning
Downs Syndrome as well as to provide a forum for a sharing of feelings and common experiences. The group meetings were deemed a great success by participants and parents. For most siblings the meetings afforded their first opportunity to meet peers involved in similar family experiences.

Murphy, et. al. were impressed with the compassion of the siblings and the continued interest they evidenced in working with their handicapped brother or sister. Some of the siblings initiated special projects after the group meetings were completed. Others said during a post-program questionnaire that they were assisted in discussing their sibling's condition with friends by the suggestions of individuals whom they met during the group meetings.

In summary, it can be observed that there are differences in the manner in which siblings are thought to be influenced by the presence of a handicapped child in the family. The psychiatric viewpoint once again warns of disastrous consequences. The Farber idea of "sibling role tension" and the studies that were offshoots of Farber's explorations investigate how social class, birth order and other factors have an impact on sibling adjustment. Particular attention is paid to the potentially negative influence that this experience can have on the eldest daughter. A final group of studies noted that there may be consequences in this experience that had been previously unreported. These consequences, focusing on the idea that the handicapped sibling may experience a greater degree of empathy than siblings of the nonhandicapped, suggests that this may be a new avenue of research.

Grossman (1972), Sagers (1973) and Bernard (1974) suggest that siblings of the handicapped tend to be more sensitive and appreciative
of the misfortunes of other people. These suggestions contradict traditional psychiatric theory which viewed the presence of a handicapped child in the home as a portent of family dislocation. Just as Gath (1972) had to question her original assumptions after reviewing her data, so may others be compelled to challenge similar assertions.

Grossman, Sagers and Bernard recommend that additional investigations be undertaken to determine if siblings of the handicapped are indeed consistently more sensitive than siblings without a handicapped child in their family. It is also suggested that explorations of the origin of this differential sensitivity take place. Questions that are prompted by the conclusions of these researchers include: how does the experience of having a handicapped sibling promote greater sensitivity? how does this proclivity toward empathy manifest itself in childhood? how early in childhood can differences on the construct of empathy be observed?

It is clear that in order to explore the idea of empathy and its relation to the presence of a handicapped sibling in the family, a thorough analysis of the construct of empathy must be conducted. Empathy as a psychological and developmental concept must be studied. Then forces which influence the emergence of empathy in children can be investigated.

**THE CONSTRUCT OF EMPATHY**

Empathy can be an elusive concept. It can be viewed in a variety of contexts and associated with numerous meanings. Since the present study is seeking to investigate how the presence of a handicapped child influences the development of empathy among siblings of the handicapped, it is of particular importance to study empathy in a developmental and
sociocultural setting. Yet other aspects of empathy should also be presented in order to understand the full dimension of this construct. Therefore, this section will be divided into several components: definition of the construct of empathy; empathy as employed in a therapeutic context; empathy as a developmental concept; prominence of Feshbach's research in the development of empathy; antecedents in the development of empathy; familial and cultural factors that influence the emergence of empathy in children.

Definition of the Construct of Empathy

There are numerous definitions of empathy in the literature. The nature of the particular definition generally reflects the school of thought of the theorist advancing the concept. Theorists who have discussed the idea of empathy have had perspectives derived from interest in personality theory, social development, cognitive development, physiological development and counseling strategies. Empathy is used with such diverse meanings that the carefully worded definition of one theorist has little to do with the operational definition used in research on empathy by another theorist.

Clark (1980) laments that "the available literature does neglect a clear definition and comprehensive theoretical approach to this important phenomenon." He offers his own definition, "Empathy is the capacity of an individual to feel the needs, the aspirations, the frustrations, the joys, the sorrows, the anxieties, the hurt, indeed the hunger of others as if they were his or her own. . . The very opposite of rigid egocentricity; empathy is the other extreme of insensitivity. . . Empathy becomes a compelling abstraction that interferes with the free functioning of organismic, egocentric, concrete dynamics."
Hogan (1969), a social psychologist who has devoted considerable attention to the construct of empathy in his research on moral development, defines empathy as "the intellectual or imaginative apprehension of another's condition or state of mind without actually experiencing that person's feelings."

Dymond (1948) was one of the first theorists to consider empathy in both a clinical and social psychological framework. She created a modified scoring of the Thematic Apperception Test to measure empathy. She defines this concept as the "imaginative transposing of oneself into the thinking and feeling and acting of another and so structuring the world as he does."

Rogers (1975), primarily concerned with discerning and developing empathy in the therapeutic relationship, defines empathy as the "ability to perceive the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the 'as if' condition." He adds that his view of empathy is a "complex, demanding, strong yet subtle and gentle way of being."

The language used in these definitions is sufficiently imprecise to enable general conceptual consensus. It can be agreed that empathy involves a cognitive transposition to understand the perspective of another person.

Empathy is considered to be an important concept for a variety of reasons. Cattrell and Dymond (1949) maintain that empathy is the basic process in all social interactions. Hogan (1967, 1969), echoing Kohlberg (1969), considers this to be a vital component in the growth of moral development. Hoskins (1946) writes that inadequate empathy is the
primary cause for the development of schizophrenia. Clark (1980) believes that empathy is among the latest appearing and most profound developments in human evolution.

**Empathy in a Therapeutic Context**

Empathy has its most elusive meaning when attempts are made by counseling psychologists to measure and observe it. Truax and Carkhuff (1967) and Truax and Mitchell (1971) present lengthy discussions of the role of empathy in the therapeutic process. They conclude that empathy—seen as therapist interpersonal skill—is one of the two most important variables in therapeutic effectiveness. Luborsky (1971), analyzing 166 controlled outcome studies, supports this contention. Gantt, Billingsley and Giordano (1980) maintain that empathy can be improved through systematic training and retained through periodic retraining.

Among the devices that have been used to measure empathy in this context are Dymond's Empathy Test (1949), Cassell's Test of Social Insight (1963), the Chapin Social Insight Test (1942), the Truax Accurate Empathy Scale (1966), and the Recognition-Assessment-Empathy Scale (1973). Instruments range from paper and pencil tests that provide selection of alternative interpretations to social situations, to micro-counseling observational coding systems to determine empathic counselors response to clients, to tools that could be employed in the course of group dynamics training.

No single tool has received persistent use or consistent praise. Hogan (1969) criticizes Dymond's test for cumbersome scoring and questionable methodology in its construction, Cassell's test for improbable validity and Chapin's test for confusing social effectiveness.
with empathy. Kurtz and Grummon (1972) review six empathy scales that have been used by counseling psychologists. They found that there was little correlation among scales that were purporting to measure the same variable. They write that "the data reveal not a unitary construct but six different variables which are thought to be be similar but in fact are not."

**Empathy as a Developmental Concept**

There is equally divergent opinion as to the origin and development of empathy. Theorists have focused on empathy as a crucial component of Piaget's view of child development, empathy as an evolutionary aspect of child development, empathy in relation to family cohesion and empathy as a by-product of cultural and familial factors.

It is important to recognize the influence of Piaget's (1968) theories of child development when approaching the idea of empathy. Empathy as a developmental concept is central to his notion of the stage of pre-operational, intuitive intelligence that occurs during the early childhood period of two to seven years of age. In discussing how the development of language affects the transformation of the child's thinking in this period Piaget postulates that children are not yet capable of taking the view of another person. He analyzed the functions of spontaneous language among children at this stage and observed that conversation remained rudimentary and linked to material action. He writes, "When they try to furnish explanations to others, they are not able to put themselves in the place of the other person who does not know what they are talking about; they speak as though they were talking to themselves." Perspective-taking, according to Piaget, begins in the
stage of concrete operations (ages seven to 12) and culminates at the
stage of abstract intellectual operations (adolescence).

The transition in perspective-taking abilities from early to middle
childhood is a vital component of Piagetian theory. The child entering
the concrete operational stage is "liberated from his social and
intellectual egocentricity and becomes capable of new coordinations
which will be of the utmost importance in the development of
intelligence and affectivity."

Since empathy, defined as perspective-taking, is central to
Piagetian theory it is of little surprise that there has been
controversy over the age of emergence of empathy in children. While
Piagetians have maintained that genuine perspective-taking coincides
with middle childhood, other theorists have concluded that empathy is
evident in pre-school children. Chandler and Greenspan (1972)
acknowledge that acceptance of the idea of perspectivistic thinking
among pre-schoolers would "force a major revision in the theories of
Piaget and his co-workers."

Borke (1971) agrees that empathy increases with age but she takes
issue with the notion that very young children are incapable of
understanding another person's perspective. Borke criticizes previous
research that has upheld the Piagetian developmental model by differing
with those theorists for failing to present tasks that are within the
response capabilities of children as young as three years old. She
presented pre-school children with a series of happy, sad, afraid and
angry faces and then asked them to match the face to the slide portrayed
in a story. She found that while social sensitivity increased with age,
perspective-taking could be comprehended by children as young as three
years old. Identification of the happy affect appeared to emerge earliest. Fear was the latest affect to be observed, although the majority of children of four and one half to five years of age were able to identify correctly this emotion. Borke concluded that there was reason to challenge Piaget's theory, contending that the task used to measure empathy is crucial in determining its existence in young children.

Calling Borke's study "a major retreat in conceptual clarity," Chandler and Greenspan (1972) challenged her theoretical assumptions and methodology. They contended that her study merely tested the accuracy of the child's social judgment rather than his ability to think or feel something that is different from his own viewpoint. Chandler and Greenspan devised a task that had two phases. In the first phase a similar activity as undertaken by Borke was conducted. In the second phase the same picture was presented with the addition of another child who was presumably unaware of the emotion that was portrayed in the picture during the first phase. The degree to which the child could distinguish between the first and second phases was the appropriate measure of empathy, according to this research. Their findings led them to conclude that while Borke is correct in noting that children are often able to anticipate accurately the affective responses of others, the assumption of a perspective different from one's own does not occur until middle childhood.

Borke (1972) offered a rejoinder to Chandler and Greenspan. Citing the theories of Harry Stack Sullivan and George Mead, she endorsed a view of empathy as a continuous movement that proceeds through a series of hierarchial stages. Borke provides examples of primitive forms of
empathy in children as young as two years old. She acknowledged that early empathic awareness is different from Piaget's final relativistic stage, but she maintained that nonegocentric behavior does occur in early childhood. In other studies (Borke, 1973; Borke and Su, 1972) Borke extends her theory and reports that her conclusions are applicable in a cross-cultural context.

Other investigations (Borke, 1975; Devries, 1970; Fishbein, et al., 1972; Hoy, 1974; Huttenlocker and Pressen, 1973; Selman, 1971) have continued to explore this topic from a Piagetian and non-Piagetian point of view. Ianotti (1975), reflecting on the controversy, observed that much of the disagreement in the empathy literature is due to confusion about the nature and meaning of the construct. In attempting to provide a review of the literature he writes, "Unfortunately, these research reports are becoming increasingly difficult to integrate due to different and in some cases conflicting, definitions to assessment techniques."

Shantz (1972) notes that researchers studying empathy in children have generally approached this construct in one of two ways. The most frequent definition is cognitive—the child understands how another person feels. The other definition is affective—the child feels the same emotion as the other person.

Prominence of Feshbach's Research in the Development of Empathy

The research of Feshbach (Feshbach and Roe, 1968; Feshbach and Feshbach, 1969; Feshbach, 1975) has dominated the discussion of empathy within the last decade. Feshbach and Roe's (1968) original study departed from the Piagetian notion of the perception of empathy as a component of perspectivistic thinking. They wrote that empathy must be
conceived of "as a vicarious emotional response of a perceiver to the emotional experiences of a perceived object." Mere sensitivity to the emotional states of others did not take into consideration the emotional experience of the empathizer. Feshbach (1975) writes, "Our work restricts the empathy reaction to a match in affective response between subject and object... the subject assumes the emotional attributes of the stimulus person."

Feshbach and Roe (1968) devised a series of slides that depicted four different affective states—happiness, sadness, fear and anger. For each affective state two slides were created. A set of slides was made for both boys with a male central character and for girls with a female central character. Accompanying each slide sequence was a short narration describing the events reflected in the slides. The narrations were constructed so that the use of specific or general affective labels were avoided. The following is one of the narrations for boys illustrating sadness:

Slide I: Here is a boy and his dog. The boy goes everywhere with his dog, but sometimes the dog tries to run away.

Slide II: Here the dog is running away.

Slide III: This time the boy cannot find him and he may be gone forever.

Following the first administration of each slide the child is asked, "How do you feel? Tell me how you feel." After all the slides are shown they are administered once again with the question posed now, "How does this child feel?" The first response is designed to measure empathy and the second is expected to measure social comprehension. Subjects were divided into four groups:
Boys observing slides of boys; boys observing slides of girls; girls observing slides of girls; girls observing slides of boys.

Feshbach and Roe (1968) found that there was a significant difference in subject response to empathy and social comprehension questions. Empathy was consistently higher when children observed members of their own sex engaged in a particular activity. Yet regardless of sex, they were able to identify the emotion of the main character in the slide when they were asked how that child felt.

Feshbach and Roe (1968) note that the contrast between empathy and social comprehension data lends support to their concept of empathy. They write, "these results indicate that the empathy measure is distinct from the social comprehension measure and that the variations in empathy cannot be accounted for solely by ability to recognize the affective experience of others. Social comprehension may be a necessary prerequisite for empathy. However, given accurate recognition of the affective state of the stimulus person, there is still considerable variation in the empathic response to that stimulus. This variability in empathy, moreover, is not random but is systematically related to the similarity between the sex of the child and the stimulus person." They conclude their article with a recommendation for investigation into the antecedents and social consequences of the development of empathy.

The notion of similarity has been applied to the analysis of sex differences in relation to empathy. A theoretical implication of similarity would be that a child should react with greater empathy toward a setting that included children of his sex. Feshbach and Roe
(1968) studied this variable by dividing their subjects into the four aforementioned groups. For every emotion except fear children exhibited greater empathy toward members of their own sex. In the fear category boys had greater empathy toward girls in a fearful situation than they had for members of their own sex. There was no significant difference for boys or girls to possess a greater degree of empathy in the Feshbach and Roe study when sex was controlled, although a tendency was exhibited for greater empathy among girls.

Hoffman and Levine (1976) replicated the Feshbach and Roe inquiry and also found that there was a nonsignificant tendency for girls to engage in greater empathy than boys. They contend that boys may be more prone to consider action alternatives rather than feeling alternatives in interpersonal situations. In another study, Hoffman (1975) tested fifth and seventh grade children and their parents. He investigated the idea of moral internalization, a notion considered conceptually linked to empathy. He found that consideration for others was generally more prevalent among females and that moral transgressions were associated with guilt among females and fear among males.

Feshbach and Feshbach (1969) did find sex differences in the interrelationship between empathy and aggression. Two groups of children—ages four and seven—were divided by sex. Measurements were obtained indicating degree of aggression and empathy. Teacher ratings were used to obtain the aggressive behavior index and the Feshbach and Roe test was used to measure empathy. No significant relationship between empathy and aggression was found to exist for girls. For boys, this relationship was dependent on age level. In the younger age group high empathy boys were rated as significantly more aggressive than low
empathy boys. In just three years an inverse relationship was obtained, with high empathy boys being rated as significantly less aggressive than boys with low empathy scores.

Although Borke (1971) did not find sex differences in her research, she found a tendency for girls to display greater empathy than boys. She explains her findings by speculating that children from traditional homes would develop a stereotyped self-description by pre-school age that counseled against boys viewing themselves empathically.

Another dimension of similarity was considered by Klein (1971). He studied the variable of race and found that children evidenced greater empathy toward members of their own race. He varied the Feshbach and Roe slides by changing the race of the central character. He administered the test to females in four groups—black females observing black females, black females observing white females, white females observing black females and white females observing white females. Greatest empathy was observed in the black-black and white-white groups.

**Antecedents in the Development of Empathy**

Researchers have reiterated the need for studies that explore the antecedents of empathy (Borke, 1971; Feshbach, 1975). Antecedents have been viewed broadly as global environmental nuances that promote or inhibit empathy (Aronfreed, 1968; Barnett, et al., 1980; Borke, 1973; Dymond, 1948; Hogan, 1975; Stotland and Dunn, 1963) or quantitatively incremental events that specifically encourage or discourage empathy (Eisenberg-Berg and Lenon, 1980; Marcus, Telleen and Roke, 1979; Strayer, 1980). Research in the latter area has concentrated on observations within the naturalistic environment.
Marcus, Telleen and Roke (1979) noted that an extension of the theories of Feshbach (1975) and Hoffman (1976) would suggest that a high level of empathy would facilitate the development of cooperative behavior "since its pleasurable consequences would be vicariously experienced." In their investigation they observed children in free play situations and also administered the Feshbach test as well as a teacher rating on cooperative behavior. They found a positive correlation between teacher ratings of children's cooperation and the narrow and broad empathy scores from the Feshbach test. There was not a significant correlation between these measures and rater observation of empathic behavior in free play situations. Teacher ratings also correlated positively and significantly with age. Marcus, et. al. support further research in the naturalistic setting, noting that the delimitation of highly complex behaviors may increase reliability while sacrificing validity.

Marcus (1980) also investigated the relationship between empathy and popularity in pre-school children. He used the Feshbach test to measure empathy and compared this with teacher ratings of popularity. He also examined developmental differences in the emergence of specific affects (happiness, sadness, anger, fear) between the three and four year old children in his sample. Popularity was measured by the use of a ranking scale and social acuity, an additional empathy measurement, was evaluated by a modified version of an instrument developed by Hogan (1975). He found that there was a positive correlation between both measurements of empathy and teacher ratings of popularity. Marcus also found developmental differences in the emergence of specific affects in the two age groups. Fear appeared to be a later developing emotion
while Marcus noted that "empathic sensitivity to happy feelings both develops prior to and separately from negative feelings." Marcus advocated a differential focus on the development of empathy with an emphasis on event sampling children's positive and negative responses to their environment.

Eisenberg-Berg and Lenon (1980) critiqued the Feshbach and Roe scale, writing that certain characteristics of this instrument could diminish the test's power for measuring young children's affective responses. They presented four general criticisms: the studies may be too brief to evoke vicarious emotional responding; the fear and anger emotions may be too complex for pre-schoolers to comprehend; nonverbal responses should be included; the test was administered by an unfamiliar person in an unfamiliar setting. They created a modified version of the test that attempted to meet these criticisms.

These authors found that high empathic responding was negatively related to frequency of spontaneous prosocial behaviors and that nonverbal measures of empathy were marginally positively related to asked-for prosocial behaviors. They suggest that the empathy scores may, in fact, be measuring social desirability rather than empathy since children are asked how they feel about the slides. The demand characteristics of that question may detract from an authentic assessment of empathy.

Strayer (1980) also studied empathy in the natural environment. She advanced the idea that the naturalistic investigation enables better assessment of the motivational component in empathy. She writes, "Cognitive demands placed on empathic responding in a natural context may likely be more familiar, concrete and less ambiguous than
perspective-taking and experimenter-devised tasks." Strayer observed 14 children with a mean age of 59 months over an eight week period, utilizing group sampling and event sampling procedures. Two perspective-taking tasks were also administered. She found that pre-schoolers were most responsive to happy emotional displays. Strayer, echoing Borke (1971) and Marcus (1980), hypothesized that "motivational and response requirements for happy displays are the least conflictual and do not involve approach-avoidance considerations or tax response ingenuity." Strayer also noted that most empathy responses were spontaneous and that empathic responses did not appear to be based on reciprocal reinforcement.

A modified naturalistic study that employed the idea of developmental perspectivism was conducted by Buckley, Siegel and Ness (1979). They extended the work of Rubin and Schneider (1973) and used Borke's test of perspective-taking to compare empathy with observations of altruistic behavior among children from three and one half to eight and one half years of age. A situation was contrived in which a child had the opportunity to assist another child. Observation of sharing in a structured setting was also undertaken. The researchers found that those children who engaged in altruistic behavior had significantly higher empathy scores. They concluded that a cognitive component to prosocial behavior is evident and increases with age.

Hughes, et. al. (1981) modified the Feshbach scale in their exploration of children's empathic understanding of how other children respond to events and their cognitions about their own emotional reactions to the affective experience of another child. They studied children with mean ages of 5.8 and 7.8 years to determine if
perspectives and situations are viewed differently between these two age groups. They used the Feshbach scale and altered test administration by conducting a brief interview to discover why children responded in a particular manner. The child participated in two testing session that were conducted one week apart. One session was called Other and focused on how the central character felt. The other session was called Self and focused on how the child felt.

Hughes, et. al. (1981) found distinct developmental differences. Younger children tended to offer more concrete, egocentric explanations for actions in the stories. Older children tended to go beyond situational cues and devise affective inferences. The older children were able to place themselves cognitively in the other child's place. In addition, Hughes, et. al. found that the order of Self/Other presentations had a bearing on the responses of younger children. When younger children were initially asked to focus on their own emotional reactions, they provided more mature, perspective-taking responses when they were then asked about the responses of the central character. The authors write, "The findings are provocative because they suggest that children's thinking about their own reactions to affect in others might improve their understanding of others' internal experiences rather than increasing the likelihood of a more egocentric orientation."

Familial and Cultural Factors that Influence the Emergence of Empathy in Children

In exploring the social antecedents of empathy Dymond (1948) and Hogan (1975) have conducted studies attempting to isolate family characteristics that correlate with high empathy ratings among children. Dymond (1948) found that a close parent-child relationship tended to
foster higher empathic ability than a distant one. Hogan (1975) concludes that there are four factors affecting the development of empathy in children: "there is an intellectual component to empathy; empathy may be encouraged by parents who attempt to inculcate into their children humanistic values such as consideration for the rights of others; empathic tendencies can almost surely be modeled; a degree of suffering is necessary before one can resonate to the suffering of others."

Both Hogan (1975) and Dymond (1948) view empathy in light of Cattrell's (1942) role theory. In explaining role theory Hogan distinguishes between role structure and character structure. Role structure, a relatively changeable and conscious phenomenon, is the self-presentation that one utilizes to interact in everyday situations. Character structure is seen as the residue of accommodations that the individual makes with the demands and expectations of family and culture. Empathy emerges in childhood as an aspect of character structure. It is relatively unconscious, unchanging and insensitive to situational influences.

Aronfreed (1968) and Stotland and Dunn (1963) also investigated the social environment as it relates to empathy. Aronfreed studied the affective response in relating to the experiences of others. He writes that empathy "depends in part at least upon the child's having experienced that affect. On a broader level, it is suggested that those aspects of the socialization process that relate to the experience, expression and restraint of feelings are highly relevant to the development and manifestations of empathy." Virtually identical conclusions were reached by Stotland and Dunn.
Barnett, King, Howard and Dino (1980) have investigated the relationship between parental empathy and the influence that this has on the formulation of empathy in children. Barnett, et. al. studied four aspects of the parent-child relationship: parents' empathy, affection, approach to discipline and emphasis on others' feelings. A self-report instrument designed to measure adult feelings of empathy was administered to 54 sets of parents. The Feshbach and Roe scale was administered to the children. Children had an average age of five years.

Barnett, et. al. found once again that there was no significant sex difference in the empathy scores of children. Mothers, however, rated themselves as significantly more empathic than did fathers. The empathy scores of the girls seemed to be positively related to the mothers' scores and negatively associated with the fathers' scores. There were no significant correlation between the scores of boys with the ratings of either parents.

Barnett, et. al. suggest that empathy becomes increasingly associated among children as a feminine characteristics. Of particular interest was the report by mothers that they tended to be more affectionate with their children and emphasize other individuals' feelings in discipline and nondiscipline situations.

The cultural antecedents of empathy were investigated by Borke (1973). Her test was administered to middle and lower class American children from three to six years of age as well as middle and lower class children living in Taiwan. She was attempting to evaluate the universality of the development of empathic awareness and the sociocultural determinants that influence its emergence. She again
found that empathy as defined by her assessment tool is evident in children as young as three years of age. The affect of happiness was identified correctly by over 90% of children from both cultures and classes by the age of three and one half. Fear continued to be the latest emerging affect.

Although all affects showed an increasing emergence with age, there were differences in the rate at which the various affects developed. For example the affect of sadness was identified by 67% and 76% of the Chinese middle and lower class children, respectively, by the age of three and one half. This compared with only 50% of the American children at the same age. Borke ascribes differences in affect recognition to distinctions in the socialization processes between the two cultures. In explaining the tendency for three year old middle class Chinese children to respond more readily to fearful situations she noted that, "this increased awareness of fearful situations among very young Chinese middle class children may reflect the overprotective tendencies of Chinese middle-class parents, who frequently set limits on their youngsters' active exploratory behavior because they are afraid the children will hurt themselves."

The role of familial and cultural socialization was also apparent, according to Borke, in the proclivity for lower class Chinese children to demonstrate empathy toward angry situations at a later age than the other groups. She wrote that, "the greater inability of lower class Chinese children to perceive angry responses in others as compared with middle-class Chinese and middle-class and lower-class American children may be related to the extreme subservience expected of lower-class individuals in the Chinese society."
Borke's contribution in this study is the recognition that there is a dual component to empathy. It is at once developmental since it transcends the boundaries of a particular culture. Yet its emergence can also be affected by the cultural and family environment. In her conclusion she writes that this research suggests that "empathy may well be a basic human characteristic related to social adaptation."

In summary, empathy can be viewed in a variety of dimensions. Empathy is considered a key ingredient in the cultivation of successful therapeutic interactions. It is also a controversial developmental concept that can be viewed from both a cognitive and affective perspective. The cognitive viewpoint has inspired disagreement among those who subscribe and disagree with Piaget. The principal area of controversy has centered around the age of emergence of the capability to engage in perspectivistic thought.

Research on empathy as an affective concept has been dominated by the investigations of Feshbach. The Feshbach-Roe Affective Situation Test and its various offshoots has been the main measurement of empathy in the past decade. The Feshbach test has developed norms, reliability and validity that are superior to other tools. Adherents of this school of thought posit that the child must experience, not simply identify, the emotion that is presented. The test has been used to explore the emergence of sub-components of empathy, to discern sex role linkages to empathy and to compare naturalistic and controlled observations.

Researchers have advocated that there be a closer examination of the antecedents of empathy. Cultural and familial factors have been investigated and there is increasing support for investigation of
particular family experiences that might influence the emergence of empathy.

The union of these two areas of inquiry—the impact of the handicapped child on siblings and empathy as a developmental concept—provides an important basis for investigation.

**Purpose of This Study**

There are an increasing number of children with a variety of handicaps who will remain alive through advances in medical research. As the movement toward de-institutionalization continues, many of these children and others who were previously placed in residential settings, will live at home. Federal law and a host of state laws require appropriate education for these children. As the number of families with mentally handicapped children residing at home increases it is important to examine the social and psychological effects on the family.

Although parental reaction to a handicapped child has been considered an important research focus, there has been little emphasis on the effect that the presence of a retarded child has on siblings. The conventional wisdom dictated that the effect would be deleterious on the normal sibling. Those who have conducted research have not necessarily found that there was the negative impact that had been expected. Some researchers suggest that siblings experience an increase in empathy.

It is important to investigate this impact in order to understand this experience on the family that retains the child in the home and to determine whether the siblings of young handicapped children tend to experience greater empathy than siblings of the nonhandicapped.
Researchers have also underscored the importance of investigating the familial antecedents of empathy. There has been the suggestion that the development of empathy can be affected by cultural and family experiences.

**Null Hypothesis**

There will be no difference in empathy among children four and one half years of age to eight and one half years of age who have younger handicapped and younger nonhandicapped siblings.
CHAPTER II
METHODOLOGY

Subjects

The sample consisted of 60 subjects between the ages of four years six months and eight years six months. One group consisted of children who had a handicapped sibling between 12 months and three and one half years of age. The other group consisted of children who had a nonhandicapped sibling between 12 months and three and one half years of age.

Each group was composed of 15 males and 15 females. Breakdown of the group included:

<table>
<thead>
<tr>
<th></th>
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<th>Females</th>
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<tr>
<td>&lt; 7 years</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>&gt; 7 years</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

All children were caucasian, middle class and resided with their natural mother and father. The majority of the children with nonhandicapped siblings lived in middle class communities in Anne Arundel County, Maryland. The majority of children with handicapped siblings resided in Anne Arundel County, Maryland. Several children in both groups lived in Montgomery County, Maryland.

Minimum age eligibility for inclusion in the study was four years six months at the time of testing. Maximum age eligibility for inclusion in the study was eight years six months at the time of testing.
In order to be considered a sibling of a handicapped individual the child had to possess a handicapping condition that had been certified by a physician or psychologist. The handicap had to have a cognitive component in which the child had been diagnosed as moderately, severely or profoundly retarded. Since the handicap had been verified at such a young age the magnitude of the disorder for those involved in study was typically quite profound.

A breakdown of handicapping conditions include:

- Mental Retardation = 8 children (unknown etiology)
- Cerebral Palsy = 7 children
- Genetic Anomalies = 7 children
- Downs Syndrome = 5 children
- Neurological Impairment = 3 children

All handicapped children were enrolled in educational and therapeutic programs that provided direct service to children and developmental guidance to parents. Children had received services from the disciplines of early childhood education, physical therapy, occupational therapy, speech therapy, and psychology.

All of the children tested were either enrolled in nursery or regular elementary schools. According to individual parental report none of the children had experienced significant school learning problems. All children were enrolled in regular school programs and none had been referred for special education, psychological or counseling services. There were no other handicapped children in the family besides the targeted child.
Experimenter

The author, a caucasian 30 year old male, served as the experimenter throughout the study. He was solely responsible for initiating contacts with parents and conducting the study with individual children. Although his professional endeavors had made him acquainted with the handicapped children enrolled in the Anne Arundel County Infant Stimulation Program, he knew few of the siblings who became involved in this study prior to the time of testing.

Measures

The Feshbach-Roe Affective Situations Test was used as the measurement in this study. This instrument was developed by Feshbach and Roe (1968) at the University of California at Los Angeles in 1968.

In conformity with the testing procedures outlined by Feshbach, this tool was individually administered to children during a single testing session.

This research endeavor accepted Feshbach's 1968 definition of empathy as the operational definition for this work. The operational definition noted that empathy must be conceived of as "a match in affective response between subject and object . . . the subject assumes the emotional attributes of the stimulus person."

Procedures

Generally, the examiner telephoned the family to request permission to conduct the testing. A brief explanation concerning the nature of the instrument was provided. Parents were assured that the testing tool would not be emotionally harmful to their children. The majority of parents of the handicapped and nonhandicapped siblings consented to the
evaluation. Several requested that they remain in the room during testing, but withdrew that request when it was explained that their presence would violate the standardization necessary for accurate assessment of results.

A mutually convenient time was arranged for testing at the family's home. Parents were encouraged to discuss the time and date of evaluation with their children so that testing would not interfere with a child's favorite after-school activity.

The examiner administered all testing in the family's home. Testing was done during the late afternoon or early evening during the school week or during the day on Saturday and Sunday. All evaluations were carried out between March and June 1981.

Testing was typically preceded by discussion with parents. Parents were told that this was a measure to learn more about siblings of the handicapped. This explanation was satisfactory to many parents. Others were convinced that there was a hidden motive to the testing and they wished to know about the "real" purpose of the investigation. Several were particularly interested to discover if the instrument would provide information about the child's intellectual or emotional functioning. Pre-testing discussion with parents lasted between 15 minutes and one hour. Written parental consent for the testing was then secured (See Appendix A).

Following this discussion the examiner adjourned to a separate room with the child to be tested. This room was either the child's bedroom, the family den or recreation room. If a separate room was unavailable, the main room—living room or kitchen—was utilized. In this situation the rest of the family went to another room.
Before administering the test the examiner established rapport with the child. This process took from five to 10 minutes and consisted of general discussion about the child's school and extracurricular activities. The examiner never initiated discussion about the child's siblings or feelings about handicapped people. Occasionally the child mentioned his younger brother or sister during this rapport portion. The examiner acknowledged the child's remarks in a neutral manner, taking care not to appear unduly interested in this aspect of the child's life.

The author then set up the equipment for testing—a Wollensak slide projector, the slides of the Feshbach Affective Situations Test and a large white screen. He explained to the child that some slides were about to be shown and these slides would be accompanied by a story (See Appendix B). Individual stories would be completed after three slide presentations and then questions would be posed.

The four sets of slides depicting happiness, sadness, anger and fear were shown in random order. During the administration the child was asked, "How does this make you feel?" or "How do you feel?" The examiner wrote the child's responses verbatim on a separate reporting and scoring sheet (See Appendix C).

Total testing time was approximately 25 minutes for the younger subjects and 40 minutes for the older, more verbal subjects. At the conclusion of the testing the examiner completed the evaluation by asking the child which slides he/she most enjoyed, which he/she did not enjoy. A brief discussion was held on the child's overall feelings toward the slides.
The examiner and child then rejoined the family. The examiner thanked the child for his participation and presented him with a trinket to express his gratitude. The author praised the child in front of his parents and the child then usually departed from the room.

Another discussion was usually held with the family at this time. The examiner reiterated that the child had been helpful and had responded well. Often the parents requested that the examiner meet the other children in the family. A special point was made to interact with the younger handicapped child if that child was present. Total duration of the home visit was one and one half to two hours.

A hand-written thank you note was sent to each family within five days of testing.

Scoring

The protocols were scored according to the revised procedures discussed by Levine and Hoffman (1975). This method replaced the previous procedures outlined by Feshbach and Roe (1969). The latter procedure simply assigned a correct (score of 1) or incorrect (score of 0) score to each statement. The correct score meant that the child had precisely identified the affect presented (i.e., labeled the story portraying happiness when the "happy" slides were shown). The incorrect score meant that the child had incorrectly labeled the slides.

Levine and Hoffman (1975) criticized the original scoring procedure, claiming that the either/or scoring method did not permit credit granted for labels that, though not precise reflections of the feelings in the slides, were in the general direction of those feelings. They advocated a system that granted 2 points for precise matches; 1
point for matches in the correct direction; 0 points for labels that were inaccurate reflections of the feelings depicted in the slides.

In the Feshbach-Roe system a child who stated that he was "angry" when he viewed slides portraying "anger" would receive a score of 1. Any other label for that slide would receive a score of 0. In the Levine-Hoffman method the child who stated that he was "angry" when presented with the same slides would receive a score of 2. Labels that were in the general direction of anger—such as feelings of being "unhappy"—would receive a score of 1. Labels that were completely incorrect would be granted a score of 0.

The empathy scores were reflective of the slides in which the child was asked how he/she felt. There were four affects—happiness, sadness, anger, fear—with two stories per affect. With the Hoffman-Levine scoring method each affect had a potential range of scores from 0 to 4. Total scores for empathy could range from 0 to 16.

Scores were calculated after all testing had been completed. To avoid examiner bias, protocols did not identify whether the child was the sibling of a handicapped or nonhandicapped child. This information was on a separate page and protocols were distributed randomly prior to scoring.

To ensure reliability the protocols were independently scored by a doctorally trained psychologist. Inter-rater percentage of agreement was determined to yield a correlation of .98.

Family Interviews

Family interviews were considered to be a supplementary source of information. The open-ended, semi-structured nature of the interviews
permitted a range of feelings and experiences to be shared between the families and the interviewer.

Six interviews were conducted. The interview schedule was based on the format developed by Caldwell and Guze (1960) in their early work with adolescent siblings of retarded children. Caldwell and Guze formulated 21 questions that were used in their research. Topics included: initial awareness of the sibling's retardation; feelings and parental explanations offered at the time of the child's birth or discovery of the diagnosis; present impact of the retarded child on the siblings' family and peer relationships; assessment of the impact on the family of having a retarded child in the home; future concerns and expectations for the retarded child. The complete interview form is presented in Appendix D.

A modification of the interview schedule was used in the present investigation. Some of the questions were conceptually appropriate for the present age group but required an alteration in language. Other questions—particularly those concerned with the sibling's possible marriage and future life direction—were inappropriate for children in this study.

Interviews were conducted in the home of the handicapped child. The interview included all the siblings of the retarded child. In two cases (K Family and C Family) there was only one sibling. In two cases (T Family and S Family) the interviews included three siblings. In families where there were multiple siblings, some of the brothers and sisters exceeded the age cut-off for the empathy assessment component of the study. They were, however, included in the interviews in order to
obtain a global impression of how siblings adjust to a handicapped child.

Sibling interviews required a greater time and emotional commitment from the families selected to become involved in this aspect of the study than had been expected in the first phase of the investigation. Typically, parents were asked if they would consent to have their children participate in a more extensive interview after the Feshbach Affective Situations Test had been administered. It was explained that the next interview would focus more directly on how the retarded child affected the sibling and other aspects of the family's life. The author informed the parents that some questions could raise issues that had not been discussed in the family and could cause some degree of emotional discomfort. He assured parents that if the sibling became distraught that questioning in the area prompting unhappiness would be discontinued. The author also said that he would be available for counseling sessions with the family if issues were raised that required a family discussion in which a counselor could be helpful.

Approximately 15 families agreed to the sibling interview. As might be expected these families had already been fairly eager to explore the emotional consequences of having a handicapped child. During the administration of the Feshbach Affective Situations Test they frequently initiated discussion with the investigator concerning their own adjustment and feelings. They generally related that they encouraged open communication with their children and friends concerning the retarded child. They were more likely to have attended parent meetings to meet other parents who had handicapped children.
When this author mentioned the possibility of further participation in the interviews the majority of these 15 families viewed this as a continuation of a learning process to which they were already committed. They agreed to consult with their children and speak with this writer within an agreed upon period of time.

Six of these families were randomly chosen for inclusion in the interviews. An attempt was made by the author to include families that were representative of the range of those involved in the sample. Nature of the child's handicap, number of siblings in the family; socioeconomic status, sex of siblings and sex of the handicapped child were all considered.

The interviews were carried out in the family home and were conducted with the siblings of the handicapped child. Family members agreed to have the interview recorded on tape. The interviews lasted between 60 and 90 minutes. Additional pre- and post-interview time was spent in establishing rapport with siblings and talking with parents. All interviews were conducted during a single home visit.

Generalizations from the interviews are quite limited. The sample was self-selected. There may be a clear difference in overall family adjustment between those who agree to participate in this type of interview and those who decline. Other factors that need to be considered include: the degree to which the siblings feel comfortable in talking with a stranger; the possible influence of an older, dominant sibling on the opinions of a younger sibling; the role of perceived social desirability in sibling responses to questions.

Analysis of the individual family interviews are included in Appendix E. Discussion of the interviews is addressed in Chapter IV.
CHAPTER III
RESULTS

This study investigated the differences in empathy among children, aged four years six months through eight years six months with younger handicapped siblings (N = 30) and nonhandicapped siblings (N = 30). All children were individually administered the Feshbach-Roe Affective Situations Test (FAST). Appendix F reports the breakdown of scores on the total empathy score as well as the four empathy affects for all 60 of the children tested.

All analyses for these data were supported in full through the Computer Science Center and the University of Maryland.

A series of t-tests was calculated to determine whether differences exist between the siblings of the handicapped and nonhandicapped. The group was broken down into several components: distinction by total population; distinction by sex; distinction by age (children < 7 years; children > 7 years).

Stepwise discriminant analysis is then employed to determine if there are differences between the individual affects that compose the construct of empathy. The individual affects include: happiness, sadness, anger, fear.

Table 1 reports the mean scores, standard deviations and determination of group differences for each of the subgroups. Scores are provided, within each subgroup, for siblings of the handicapped, siblings of the nonhandicapped and the total group. This analysis
reveals that there are no significant differences between siblings of the handicapped and nonhandicapped on any of the empathy variables.

Five separate discriminant analyses were performed on the two groups, siblings of the handicapped and nonhandicapped. The analyses were conducted to determine if combinations of affects would yield group differences. Each analysis used a different criterion variable, i.e., total group, < 7 years, > 7 years, females and males. Table 2 illustrates significant discriminant functions with the total group and the > 7 years group.

Table 3 gives more specific information of the two significant discriminant functions and reports that for the total group happiness and fear were significant; for the > 7 year group fear, sadness and anger were significant.

Table 4 provides Classification Tables to demonstrate the percentage of cases correctly predicted for each criterion variable.
### TABLE 1

**MEAN SCORES, STANDARD DEVIATIONS AND DETERMINATIONS OF GROUP DIFFERENCES FOR SUB-GROUPS ON EMPATHY VARIABLES**

#### TOTAL

\(N=60 \ - \ Nh=30; \ Hc=30\)

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<tr>
<td>Anger</td>
<td>2.43</td>
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<td>2.46</td>
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<tr>
<td>Fear</td>
<td>1.96</td>
<td>.93</td>
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</table>

\* = t value, with 58 df = -.519

#### < 7 YEARS

\(N=28 \ - \ Nh=15; \ Hc=13\)

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<td>9.38</td>
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<td>.91</td>
<td>2.62</td>
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<tr>
<td>Sadness</td>
<td>2.93</td>
<td>1.48</td>
<td>2.85</td>
</tr>
<tr>
<td>Anger</td>
<td>2.67</td>
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<tr>
<td>Fear</td>
<td>2.00</td>
<td>1.07</td>
<td>1.92</td>
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</table>

\* = t value, with 26 df = -1.10

#### > 7 YEARS

\(N=32 \ - \ Nh=15; \ Hc=17\)

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<tr>
<td>Fear</td>
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<td>.79</td>
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TABLE 1 (continued)

FEMALES
(N=30 - Nhc=15; Hc=15)

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<td>Fear</td>
<td>2.33 .82</td>
<td>2.45 1.25</td>
<td>2.40 1.09</td>
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* = t value, with 28 df = .216

MALES
(N=30 - Nhc=15; Hc=15)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X score</td>
<td>X score</td>
<td>X score</td>
<td>X score</td>
</tr>
<tr>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
</tr>
<tr>
<td>Total Score*</td>
<td>10.33 3.12</td>
<td>10.06 2.98</td>
<td>10.20 3.84</td>
</tr>
<tr>
<td>Happiness</td>
<td>3.27 1.10</td>
<td>2.67 1.59</td>
<td>2.97 1.38</td>
</tr>
<tr>
<td>Sadness</td>
<td>2.93 1.44</td>
<td>2.93 1.49</td>
<td>2.93 1.44</td>
</tr>
<tr>
<td>Anger</td>
<td>2.54 1.25</td>
<td>2.27 1.44</td>
<td>2.40 1.33</td>
</tr>
<tr>
<td>Fear</td>
<td>1.60 .91</td>
<td>2.28 1.08</td>
<td>1.90 1.03</td>
</tr>
</tbody>
</table>

* = t value, with 28 df = -.072
## TABLE 2

**DISCRIMINANT FUNCTION OBTAINED BETWEEN SIBLINGS**

OF THE NONHANDICAPPED AND SIBLINGS OF THE HANDICAPPED

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>$N_{NHc}$</th>
<th>$N_{Hc}$</th>
<th>Multiple $R$</th>
<th>Wilks' Lambda</th>
<th>D.F.</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>.342</td>
<td>.882</td>
<td>2</td>
<td>.028*</td>
</tr>
<tr>
<td>&lt; 7 years</td>
<td>15</td>
<td>13</td>
<td>.291</td>
<td>.915</td>
<td>1</td>
<td>.132</td>
</tr>
<tr>
<td>&gt; 7 years</td>
<td>15</td>
<td>17</td>
<td>.658</td>
<td>.567</td>
<td>3</td>
<td>.001**</td>
</tr>
<tr>
<td>Females</td>
<td>15</td>
<td>15</td>
<td>.423</td>
<td>.821</td>
<td>2</td>
<td>.069</td>
</tr>
<tr>
<td>Males</td>
<td>15</td>
<td>15</td>
<td>.537</td>
<td>.809</td>
<td>2</td>
<td>.057</td>
</tr>
</tbody>
</table>

* = significance at the .05 level

** = significance at the .001 level
TABLE 3
STEPWISE DISCRIMINANT ANALYSIS FOR
SUBGROUPS POSSESSING SIGNIFICANCE

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Step and Variable</th>
<th>Wilks' Lambda</th>
<th>Significance</th>
<th>Standardized Discriminant Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1 - Happiness</td>
<td>.943</td>
<td>.067</td>
<td>- .923</td>
</tr>
<tr>
<td></td>
<td>2 - Fear</td>
<td>.882</td>
<td>.028</td>
<td>+ .784</td>
</tr>
<tr>
<td>&gt; 7 years</td>
<td>1 - Fear</td>
<td>.889</td>
<td>.063</td>
<td>+ .934</td>
</tr>
<tr>
<td></td>
<td>2 - Sadness</td>
<td>.709</td>
<td>.007</td>
<td>-1.117</td>
</tr>
<tr>
<td></td>
<td>3 - Anger</td>
<td>.567</td>
<td>.001</td>
<td>+ .773</td>
</tr>
</tbody>
</table>
### TABLE 4

**CLASSIFICATION THROUGH DISCRIMINANT FUNCTION**

**OBTAINED BY CRITERION VARIABLES**

Group 1 = Siblings of the Nonhandicapped  
Group 2 = Siblings of the Handicapped

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>Predicted Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(83.3%)</td>
<td>(16.7%)</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(53.3%)</td>
<td>(46.7%)</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified = 65%

<table>
<thead>
<tr>
<th>&lt; 7 years</th>
<th>Predicted Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(53.3%)</td>
<td>(46.7%)</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(30.8%)</td>
<td>(69.2%)</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified = 60.7%
TABLE 4 (continued)

> 7 years

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>Predicted Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>12 (80%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>2</td>
<td>5 (29.4%)</td>
<td>12 (70.6%)</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified = 75%

Females

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>Predicted Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>11 (73.3%)</td>
<td>4 (26.7%)</td>
</tr>
<tr>
<td>2</td>
<td>6 (40%)</td>
<td>9 (60%)</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified = 66.6%

Males

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>Predicted Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>9 (60%)</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>2</td>
<td>5 (40%)</td>
<td>12 (60%)</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified = 50%
CHAPTER IV
DISCUSSION

This section will be divided into several components: overview of results and analysis of individual affects that comprise the construct of empathy. The supplementary sibling interviews will be incorporated into the general discussion and will also be analyzed in a separate section. Finally, the implications of the study and recommendations for further research are addressed.

Overview of Results and Analysis of Individual Affects

An overview of results indicates that there is no statistically significant difference between siblings of the handicapped and nonhandicapped on the dimension of empathy, as measured by the Feshbach-Roe Affective Situations Test. Suggestions in the literature by Grossman (1972), Sagers (1974) and Bernard (1974) that siblings of the handicapped appear to be more empathic than their agemates with nonhandicapped siblings does not appear to be confirmed in this investigation. Yet as will be discussed at the conclusion of this section, it cannot be assumed that there are no differences at all between siblings of the handicapped and nonhandicapped. Results of this investigation suggest that certain combinations of empathy subvariables may produce significant group differences.

In reviewing the fact that no overall significant differences were obtained, several interpretations can be advanced to explain this finding:
1) The first and most obvious is that there is no difference between siblings of the handicapped and nonhandicapped on this variable. While siblings of the handicapped may possess different characteristics, it does not appear that they are more empathic than their counterparts with nonhandicapped siblings.

2) It may be that the Feshbach-Roe Affective Situations Test does not provide a sufficiently accurate index of total empathic functioning. Criticisms of the instrument have been offered by a variety of researchers (Eisenberg-Berg and Lenon, 1980; Strayer, 1980). It has been argued that the test does not provide long enough stories or invite open-ended responses. It has also been argued that the testing setting is contrived and that only naturalistic observation can yield an authentic assessment of empathy. Thus, the operational definition of empathy as embodied in this investigation, rather than the actual concept of empathy, may pose problems.

3) It may be that there was insubstantial evidence in the literature to support the idea of greater empathy among siblings of the handicapped. None of the studies (Sagers, 1974; Grossman, 1972; Bernard, 1974) that suggested that there would be a difference in empathy had utilized assessment devices that specifically focused on empathy. Observations were based on the results of interviews and related standardized measurements. Empathy was generally equated with the ideas of sensitivity and compassion. There was inadequate recognition by these writers that empathy could be a developmental concept that lends itself to psychometric assessment.

4) It should be noted that the researchers who did suggest that children with handicapped siblings are more empathic based this
conclusion on the observation of adolescents and young adults. This poses several dilemmas when analyzing the present results:

a) It could be that differential empathy does exist among siblings of the handicapped and nonhandicapped, but that this difference is not apparent until adolescence. Differences might be apparent in early adolescence, when Piaget asserts that perspectivistic thinking actually culminates.

b) It could also be that there are not differences between siblings of the handicapped and nonhandicapped in empathic feelings in adolescence. However, siblings of the handicapped may perceive the demand characteristics of the interview situation to be such that they feel compelled to respond that this experience has made them a more understanding, empathic person.

This could be part of the self-definition that evolves as these children develop. It may be that in searching for a sense of meaning in which to cloak this ongoing experience, parents and siblings decide that they are more compassionate people. Since other people often reinforce this self-concept by remarking that the family handles the situation with words such as courage and dignity, it could be that this perception by others becomes part of their self-description. This self-definition seemed to be present among the older boys in Family Interview number four. They appeared to view themselves as extraordinarily compassionate people because of their commitment to their younger, handicapped brother. This seemed to provide them with a separate identity from their friends.

c) It may also be that there is a sense of selective retrospective thinking among the siblings who participated in the
studies of Grossman, Bernard and Sagers. When asked such questions as how the handicapped sibling has influenced their lives, they may have selectively recalled experiences in which their actions appeared particularly noble and empathic. The implicit socially desirable responses may have precluded the expression of negative feelings.

The possible suppression of negative feelings may have gone beyond the interview situation. The siblings themselves may have been infrequently encouraged to discuss any negative feelings associated with the condition of their brother or sister. Several of the siblings in the family interviews remarked that although they were permitted to speak freely about their handicapped sibling, it was generally expected that there would be no negative comments.

Although there are no statistically significant differences between the two groups on the t-tests, the stepwise discriminant analysis does yield some striking findings. From this analysis it is apparent that there are differences in the magnitude of contribution of the individual affects to the two groups. The stepwise discriminant analysis is employed to determine if there are differences in the pattern of affects between the two groups.

The findings of the discriminant analysis are important for two main reasons. First, they yield some significant differences between the two groups. While there may not be a quantitative difference in overall empathy between siblings of the handicapped and nonhandicapped, there are some definite differences in the manner in which these individual affects are grouped. Secondly, these results encourage researchers to refocus their energies away from empathy as a global concept and instead, look at sub-components of empathy. Researchers are
advised to address the various subconcepts of empathy. Rather than empathy as a unitary construct, the emphasis might be better directed at—empathy toward what? empathy in what situation?

Empathy may be too amorphous to approach or define with sufficient precision. The controversies in the literature as to the developmental course of empathy and the various tools designed to measure it underscore this state of uncertainty. Yet it might be wiser at this time to divide this construct into sub-themes and study the ideas of empathy vis-à-vis happiness, empathy vis-à-vis sadness, empathy vis-à-vis anger and empathy vis-à-vis fear. These particular affects are suggested since they comprise the variables in the Feshbach test.

It may be quite instructive to discern the developmental course of each of these individual affects rather than measuring them and then camouflaging their differences by collapsing them into a single score. It is also important to investigate the various combinations of these affects.

In this investigation discriminant analysis yields a number of differences between siblings of the handicapped and siblings of the nonhandicapped. For the total sample there is a difference at the $p < .028$ level; and for children $> 7$ years there is a difference at the $p < .001$ level.

It must be emphasized that this does not mean that there is an overall quantitative difference between the two groups. The total mean scores do not differ at a statistically significant level. It does mean that the particular combination of affect scores are, on some dimensions, different to a statistically significant degree. Sometimes siblings of the handicapped display more empathy on a variable; at other
times siblings of the nonhandicapped evidence more empathy. A stepwise
discriminant analysis was performed on those sub-groups that achieved
statistical significance to identify the relative contributions of each
sub-group.

The identification of the combination of affects provides a
portrait of the individual differences that are characteristic of the
two groups. This composite picture provides important theoretical
possibilities and potential clinical insights.

While it is important to advance possible interpretations for the
distinction in patterns between siblings of the handicapped and
nonhandicapped there is a danger of over-speculation. Potential
explanations for differences between the two groups must be posed with
reservation. Just as Borke (1973) counseled against exaggerated
interpretation of her cross-cultural data, the present data must be
viewed with caution.

For the total sample, the individual affects that comprise the
significant difference between the two groups are happiness and fear.
Happiness is an affect toward which siblings of the handicapped feel
less empathy than siblings of the nonhandicapped, while fear is an
affect toward which they feel more empathy than siblings of the
nonhandicapped. The happiness affect (p < .067) alone almost separates
the two groups to a statistically significant extent.

The fact that there is such a discrepancy on the happiness rating
is particularly important in light of the findings of Strayer (1980). Synthesizing
the work of other investigators, she maintained that
happiness is the earliest developing source of empathy. She noted that
there was virtual universal recognition that this emotion was correctly
identified by the age of four. When the four variables have been discussed in the literature in a developmental context the happiness variable has generally been viewed as the earliest developing affect.

Several interpretations can be posed to explain the difference on the affect of happiness:

1) It may be that siblings of the handicapped are less able to project themselves into situations that appear to be happy. The experience of having a handicapped sibling could promote a proclivity to identifying less readily with happy situations.

The content of the slides depicting happiness are essentially egocentric. The central character in one series of slides is celebrating his/her birthday and in the other series has won a trip to Disneyland. It may be that siblings of the handicapped are less likely to articulate a feeling of happiness unless some provisions for an equally happy situation are made for their handicapped sibling. It could be that siblings have learned to temper their own responses to typically happy situations by having to consider their handicapped brother or sister. This tempering could be prompted by encouragement from their parents or it could have developed from their own observations.

This idea is not advanced under the pretext that siblings of the handicapped are necessarily more caring because of their handicapped family member. It may be that these siblings have become accustomed to disappointments at the occasional restrictions of family activities. Where other children may react happily at the prospect of attending their own or a friend's birthday party, the sibling of the handicapped child may wonder if some unexpected event will prevent the party from
actually occurring. Through previous experience the sibling may have learned to cloak reactions to potentially happy situations in skepticism.

2) There is another aspect to the idea of an inability to relate to an essentially egocentric concept of happiness. As Gath (1974) suggests, it may be that siblings of the handicapped have been encouraged to think of happiness as a collective, family-oriented concept. Individual happiness may be subordinated to the happiness of the family unit. Siblings may almost think it unseemly to articulate excessive happiness if their parents are expressing regret or disappointment with their handicapped child. It may be that the notion of happiness assumes a more serious tone and that siblings learn to equate happiness with more mature events such as recovery from illness, achievement of a significant developmental milestone or discharge from a hospital (Grossman, 1972). The sibling may even feel guilty if he/she expresses the kind of happy reactions to a situation that his/her peers express.

The climate in the home may reflect the theme of "chronic sorrow" that Olshansky (1962) discussed. This subtle yet omnipresent sorrow may discourage each family member from reacting happily to conventionally happy situations. A message may be transmitted in the home that happiness will always be tinged with remorse, that the carefree happiness that other children appear to enjoy cannot be experienced since the handicapped child cannot partake in a similar experience. This sense of sadness was apparent during the interview with Family number two. The girls in this interview frequently relate that their family was "different" and their lives were less happy than the lives of their friends.
3) Yet another aspect of this situation may be a distinction in the feeling versus the expression of happiness. The slides may have indeed prompted a feeling of happiness among the siblings of the handicapped. But they may perceive that it is not proper for them to openly express this identification with a happy scenario. They may experience conflict over this contradiction—is it appropriate to freely express feelings of happiness even if individual, conventionally happy situations have not been depicted by parents as suitable sources for happiness? What does the child do who lives in a home with a tone of chronic sorrow while experiencing happiness when observing happy situations? He may learn to suppress his identification with happy situations and describe his reaction to the scenario in neutral terms.

Fear is the second affect that is a source of distinction between the two sibling groups. Fear assumes a particularly noteworthy role when the groups are subdivided by age. For children > 7 years fear is the most prominent distinguishing affect and this affect (p. < .063) alone almost enables the > 7 year group to experience significant differences.

Where siblings of the handicapped did not empathize with happiness to the extent that siblings of the nonhandicapped did, siblings of the handicapped experience a greater tendency to empathize with fearful situations. Possible explanations for the prominence of the fear response may be that fear tends to pervade the home of handicapped children. The parental fear that the handicapped child may become sick or die may generalize to a more pervasive fear that extends to other situations. When the sibling observes slides depicting potentially fearful scenarios his familiarity with this emotion may prompt a greater
degree of empathy than is generated in siblings of the nonhandicapped.

Siblings of the handicapped may be more likely to react to situations with fear since they have generally had exposure to more negatively-tinged experiences. Children with nonhandicapped siblings may be more apt to view potentially fearful situations and respond to them by casually stating, "He'll [the central character] be all right." The experiences of siblings of the nonhandicapped may lead them to conclude that children involved in situations of danger have a reasonably good chance of recovering from this experience successfully. Siblings of the handicapped, however, may react to similar situations by concluding that the scenario will end unsuccessfully. The feelings of siblings of handicapped children in Family Interviews two and five illustrate this theme. In both cases the children were > 7 years and the younger handicapped sibling had a disorder which required ongoing medical attention. They often alluded to the fear that their sibling's crisis-oriented medical condition would have unfortunate consequences.

For children > 7 years there is a somewhat different pattern between the two groups. Fear is the single most distinguishing affect. Sadness is the second variable. For sadness siblings of the handicapped appear to evidence less empathy toward this affect than siblings of the nonhandicapped. Anger is the third variable and on this affect siblings of the handicapped experience greater empathy than siblings of the nonhandicapped. This combination of affects produces a difference between groups at the .001 level of significance.

It is interesting to note that this pattern produces such a sharp distinction between siblings at the age of > 7 years. There is no
similar pattern at the age of < 7 years. This may indicate that differences among siblings begin to be operative at about the age of 7. This would coincide with Piaget's theory on the commencement of nonegocentric thought.

The pattern at > 7 years is intriguing. Siblings of the handicapped appear to respond more empathically to sadness than their nonhandicapped counterparts. Possible interpretation for the fear component was offered during the discussion on the total sample. For the proclivity of the siblings of the handicapped to identify with anger, it could be that anger is directed at the handicapped child for restricting the family's activities or for detracting from attention on the older normal sibling. The anger may also be more diffuse and be directed toward the situation. The older sibling may feel a sense of rage and anger that his younger sibling has an affliction.

The fact that siblings of the handicapped appear to experience less empathy toward situations portraying sadness is somewhat curious. It might have been expected that siblings of the handicapped would readily identify with situations that encouraged feelings of sadness. This would have seemingly conformed to the lack of identification with happiness and the tendency to empathize with anger and fear. A possible explanation for this may be that the situations portrayed in the slides are simply too mild to encourage feelings of sadness. For siblings of the handicapped an identification with the variable of sadness may have to be prompted by scenarios that depict much more profoundly sorrowful situations.
Analysis of Sibling Interviews

In reviewing the data yielded from the interviews based on the Caldwell and Guze interview protocol, several categories of analysis emerged that appeared particularly poignant in attempting to evaluate the impact of the handicapped child on siblings. These themes included: evolution of parental reactions; parental communication to children concerning the disorder; family coping mechanisms; stigmatizing effect of the handicapped child's condition; how the nature of the handicap influences the family's response. These general themes have been investigated in previous studies. They are essential to Farber's idea of the "integrated family" and have been a focus as to how families cope with the handicapped child over a long period of time.

Perhaps the most significant variable in the reaction of these siblings is the fact that parents had adjusted quite well to their handicapped child. Although parents experienced the continuum of normal initial reactions of shock, depression and disbelief, they had all integrated the handicapped child into their lives within a suitable period of time. The fact that this writer was permitted to interview their nonhandicapped children about matters of potential sensitivity indicates that these parents felt relatively secure about topics of this nature. Of course, this also raises questions about the representativeness of the sample and the generalizability of results.

One can speculate about why these parents had adjusted well to their child's handicap. There are several explanations that could be advanced. 1) For all families the handicapped child was their youngest child. For two of the families (Families 3 and 6) the handicapped child was the youngest in a two child household; in one family (Family 2) the
handicapped child was the youngest in a three child household; in two families (Families 1 and 5) the handicapped child was the youngest in a four child household; in one family (Family 4) the handicapped child was the youngest in a five child household. None of these families had to undergo the normal adjustments of new parenthood. 2) Because they had other children, these parents had been married a fairly long time (from six to 15 years) and had had the opportunity to deal with other crises. 3) These parents tended to be older (most were over 30) and to be involved in the community. Their lives prior to the birth of the handicapped child were characterized by stability. Most resided in the same community for several years and were able to obtain support from neighbors and relatives. 4) The families usually received adequate medical explanation, when these were available, from physicians and other medical personnel. 5) All the families in these interviews had been involved with the early intervention program in their county. They had received developmental guidance from teachers and allied health professionals and had been given the opportunity to participate in parent groups and meet other parents whose children had disorders similar to those of their own children. These factors have been previously reported in the literature (Bernard, 1974; Farber, 1959; Grossman, 1972; Sagers, 1973) as having a positive influence on parental and family adjustment.

Parental communication about the handicapped child's disorder was an important underlying theme. Two interrelated factors—age of the nonhandicapped siblings and adequacy of explanation of the handicapped child's problem—were noted recurrently. The older siblings in Families 1, 2, 4 and 5 were old enough (age five and over) to understand that the
new baby had some type of disorder that caused their parents to react in an unexpected manner. Children in Families 1 and 4 were provided with new information as it became available and it appeared that open communication was encouraged between parents and children. Questions about the disorder were often posed by the children to the parents. The children were informed about new surgical procedures and medical suggestions. This appeared to assist in de-emphasizing the "specialness" or remoteness of the handicapped child. The nonhandicapped children became casually familiar with Downs Syndrome, tracheotomies or respiratory disorders.

In Family 2 the siblings did not evidence much understanding about their brother's disorder. It seemed as if an insufficient explanation had been given to the children and they remained rather mystified about their brother's "disease." The siblings related that they were told that their brother had cerebral palsy and were then informed that they should not make fun of him. Further questioning did not seem to be encouraged and it may be that the girls assumed that additional questioning would be tantamount to making fun or would continue to underscore the mysteries in their brother's condition.

For the youngest siblings (those under age five) there was no single time that they could remember when they were informed about their handicapped sibling's condition. They were too young to understand the disorder at birth and they simply became accustomed to the special problems associated with the handicapped child. To them these were not really special problems, but characteristics that were inherent in the child's identity.
Among families where there were also older siblings (Families 1, 3, 4) the younger nonhandicapped sibling seemed to be more aware of the uniqueness of the handicapped sibling and also seemed to participate more actively in domestic responsibilities. This may have been due to modeling by the siblings and to the parental reliance on older children that often occurs in larger families. First born nonhandicapped siblings in two child families (Families 3 and 6), where the siblings were under age 5 at the time of the handicapped child's birth, seemed least affected by the handicapped child. The handicapped child didn't intrude on their lives, there was sufficient time for parents to devote to the nonhandicapped child's interests and their schedules were not interrupted by the handicapped child.

The two chief coping mechanisms observed among the siblings were denial and suppression. It should be noted that the magnitude of these coping mechanisms did not appear to be extraordinary. They must also be viewed in light of the age of the siblings and parental adoption of similar coping mechanisms. It is difficult, for example, to assess whether the almost universal expectation that the siblings would eventually be cured is a function of denial or is age-related.

For the younger children interviewed there is probably a dual component to this. They recognized the handicapped child's current delay and they partially expected the delay to persist and partially expected the child to be cured. It may be difficult for children who have never seen adults with the mental age of children to understand that handicapped children could still behave in a childlike manner when they are chronological adults. While only one child--age 13 years--discussed the possible dependence of his Downs Syndrome brother in
adulthood, it is probable that the other children have yet to develop
the sophistication to realistically contemplate their lives as adults.
According to a Piagetian model this type of thinking would not emerge
until the age of 12. The two other adolescent-aged siblings--from
Family 5--are either distant from the immediacy of the situation or so
preoccupied with the crises endemic to their sister's daily life that
the long-term future is not discussed.

Suppression may have been observed among the siblings in Families 5
and 6. There was little discussion of any adverse feelings concerning
their brother's handicap. They appeared to be busily involved in their
own activities and displayed virtually no negative comments about the
impact that the handicapped child had on themselves or their families.
Since parent interviews were not part of this research it is difficult
to know how parents have presented their own feelings to the
nonhandicapped children. It should be noted that in casual pre- and
post-interview conversation with parents, the parents in these families
insisted that there was absolutely no negative reaction in their nuclear
families to the presence of the handicapped child.

The siblings generally discussed few stigmatizing effects of having
a handicapped child in the family. The main problem that was discussed
was peer response to the child. Some friends warmly accepted the
handicapped child and the siblings were eager to invite their friends to
their homes. Other friends were not so accepting and three siblings
(from Families 1, 2 and 4) angrily reported incidences in which their
handicapped sibling was taunted. In Family 1 the two elder siblings had
different reactions to their handicapped sister. The eldest sister
appeared to carefully divide her home and school lives so that her
friends had minimal contact with the handicapped child. The next oldest sibling said that he enthusiastically talked about the handicapped child with his friends.

The cause of the eldest sibling's discomfort was not discovered during the interview. If the notion of similarity was employed (Aronfreed, 1968; Klein, 1970; Stotland and Dunn, 1963) it could be speculated that the elder sister experienced greater displeasure with the handicapped child because they were both of the same sex. The next oldest sibling, the only boy in the family, occupied a different status from the girls.

The siblings in Family 2 probably evidenced the greatest fear among all the families that friends would discover their brother's handicap. Since little continuous explanation had been offered as to the etiology of the handicap they may have felt that their family was somehow responsible for having a handicapped child. It appeared as if this obscure "disease" permeated the family and brought a sense of shame when they said that they weren't a "normal" family. One of the girls bitterly recalled the betrayal of her best friend when the friend revealed this mysterious secret to the other children at school.

The nature of the handicap appears to have a major influence on how the family reorganizes to accommodate the handicapped child. In only one family (Family 4) was there a definitive diagnosis at birth accompanied by a fair degree of certainty about the handicapped child's developmental course. The family was able to readjust their expectations for this child within an appropriate time frame. Also there were no unusual medical procedures involved in this child's life.
Among the other families there was a continuum of uncertainty and disruption to daily living. For Families 2, 3 and 6 the cerebral palsy or post-meningitis diagnoses meant that there would be frequent medical appointments and tentative explanations concerning future development. For Family 1 there were several emergency medical procedures that appeared to engulf the family. Family 5 lived in virtual daily uncertainty as to what might occur in the course of the day.

**Implications and Suggestions for Further Research**

It would be incautious to conclude that there are a host of implications from the results of this study. The fact that any differences at all were discovered is noteworthy. For this is the first investigation to explore the phenomenon of differences in siblings of the handicapped and nonhandicapped children prior to adolescence. It is also the first research endeavor to employ the existence or nonexistence of a handicapped sibling as an antecedent for the development of empathy.

The results of this study do not suggest that siblings of the handicapped between the ages of four and one half years and eight and one half years experience a quantifiably greater degree of empathy than children with nonhandicapped siblings. The results do suggest that these children may have a profile of empathy that differs from that of their peers. This profile portrays these children as less prone to empathize with happy situations and more likely to empathize with fearful situations. Age-related differences do not appear before 7 and at that age the profile indicates that these children may have a proclivity to empathize with fearful and angry scenarios, but have less of a tendency to empathize with sad situations.
This profile tends to confirm Farber's (1972) observation that siblings of the handicapped are more serious in outlook than siblings who have not had this experience.

Counselors and therapists should be aware of the possibility that siblings of handicapped children may present special counseling needs. A family-oriented counseling approach would probably yield the most favorable results.

Considerably more research must be undertaken before statements on differences among siblings of the handicapped and nonhandicapped can wisely be offered. From this investigation it appears that research should focus on both the impact of the child on the family as well as on the separate area of empathy as a developmental and affective construct. Recommendations for additional research include:

1) The relationship between severity of handicap and sibling behavior should be studied. The handicapped child who requires frequent emergency medical attention may inspire a different reaction in a sibling than the child who simply remains developmentally delayed. There may be constant disruption of family life in the case of the former child whereas the family of the latter child may experience regret and sorrow without dislocation.

2) The relationship between the sex of the child and sex of the handicapped sibling should be investigated. Grossman (1972) studied the effects of brother-brother, brother-sister, sister-sister and sister-brother relationships in her college-aged population. A refinement of the present investigation would involve studying these four groups in pre-adolescence.
3) The role of various numbers of children in the family should be studied. There has been speculation by Grossman (1972) and Sagers (1974) that two children families, where one child is handicapped, experience greater stress than families with more than two children. This is an area of inquiry that could prove particularly helpful in assisting families in determining the impact that additional children may have on their family.

4) The influence of the number of years separating the handicapped and nonhandicapped child and birth order are another area of inquiry. Siblings close in chronological age may have reactions to the handicapped child that are different than siblings who have a greater age span. Siblings of Downs Syndrome children, for example, are often considerably older than the Downs Syndrome child. There may be a difference in response to a Downs Syndrome child who simply retains the youngest child role than there would be for a child who is born after the retarded child and then surpasses the child developmentally.

5) Open-ended clinical instruments should supplement more restrictive forced choice and short answer psychometric instruments when studying siblings of the handicapped. Content analysis of interviews might provide additional insight into the nature of sibling experiences.

6) Since differences in this study are suggested at the age of seven to eight, further research should be conducted to determine if siblings of the handicapped and nonhandicapped continue to manifest differences through early adolescence.

Research on empathy should continue to be a fertile area of investigations. Suggestions for additional inquiries include:
7) The fact that young children must verbalize their responses to test stimuli is seen as a limitation of the instrument. It is difficult to determine the developmental nature of these constructs since respondents are required to articulate their reactions. A mixture of items that require verbal responses as well as nonverbal responses (by pointing to faces with different expressions) might enable children who are not as sophisticated in their verbalizations of feelings to express their reactions.

8) To investigate the subtleties and complexities of empathy pictorial stimuli should be varied. It would be interesting to determine a developmental sequence in the constructs of empathy that have been identified in the instrument. For example, do some situations inspire a reaction of happiness or anger at age nine that is not generally identified at the age of seven?

9) The recent emphasis on studying empathy in the naturalistic setting (Marcus, 1979) should be expanded. Observation of behavior eliminates the problems of questioning whether responses are based on social desirability factors.
APPENDIX A

PARENTAL PERMISSION FORM FOR TESTING

I, ________________________________

[Blank]

______ grant permission

______ do not grant permission

for my child, ________________________________

to participate in the University of Maryland dissertation research study conducted by Mr. Edward Fienberg. I understand that all of my child's responses will be used in confidence and that all participants will remain anonymous.

______________________________  __________________
(Parent's signature)             (Date)
APPENDIX B

NARRATIONS OF FESHBACK SLIDES

SLIDES FOR BOYS

HAPPINESS
1. This boy decided to enter a contest that he learns about on T.V. The prize is two tickets for everything at Disneyland, even including food.

2. Here he is mailing his entry hoping that he will win.

3. He has won. Here he is receiving the good news in the mail and the tickets as well. Wait until his friends and family hear about this.

HAPPINESS
1. This boy has just awakened and he remembers that today is his birthday.

2. Here he is greeting his friends who are coming to his party.

3. Now he is ready to blow out the candles on his delicious cake before he opens his many presents.
SADNESS
1. Here is a boy and his dog. This boy goes everywhere with his dog but sometimes the dog tries to run away.

2. Here he is running away again.

3. This time the dog cannot be found and the boy realizes that the dog may be gone and lost forever.

SADNESS
1. This boy has just moved into the neighborhood. He sees some boys playing a fun game. He would love to be able to join them.

2. He asks to join in. They say "no". They have enough children and besides they really don't know him.

3. The other children continue to play. He has no one to play with.

ANGER
1. Two boys are playing ball. One boy is asking the other boy not to play so close to the window because it might break.

2. The boy didn't listen. The ball did hit the window and the glass shattered all over.

3. And when the owner rushed out to see what happened, the boy who really broke the window blamed it on the other boy.
ANGER
1. The boy in the grey sweatshirt is getting ready to test his new rocket. The boy standing up is watching him.

2. The boy who was watching is trying to grab this other boy's rocket away.

3. The boy has managed to grab and take away this boy's new rocket.

FEAR
1. This boy is picnicking with his family in a wooded forest. His parents asked him to bring some water from the well near the road.

2. He seems to have taken the wrong turn because there is no road, only trees and more forest.

3. He is getting deeper and deeper in the forest. It is getting darker. Night is coming and he cannot even see where to go. He doesn't know how to find his way back.

FEAR
1. This boy sees a big dog. He does not know whether the dog is friendly or mean.

2. The dog begins to run after the boy. The boy tries to get away.

3. The boy is not able to get away and the mean dog is going to attack him.
SLIDES FOR GIRLS

HAPPINESS

1. This girl decides to enter a contest that she hears about on T.V. The prize is two tickets for everything at Disneyland, even including food.

2. Here she is mailing her entry hoping that she will win.

3. She has won. Here she is receiving the good news in the mail and the tickets as well. Wait until her friends and family hear about this.

HAPPINESS

1. This girl has just awakened and she remembers that today is her birthday.

2. Here she is greeting her friends who are coming to her party.

3. Now she is ready to blow out the candles on her delicious cake before she opens her many presents.
SADNESS

1. Here is a girl and her dog. This girl goes everywhere with her dog but sometimes the dog tries to run away.

2. Here he is running away again.

3. This time the dog cannot be found and the girl realizes that the dog may be gone and lost forever.

SADNESS

1. This girl has just moved into the neighborhood. She sees some girls playing a fun game. She would love to be able to join them.

2. She asks to join in. They say "no". They have enough children and besides they really don't know her.

3. The other children continue to play. She has no one to play with.

ANGER

1. Two girls are playing ball. One girl is asking the other girl not to play so close to the window because it might break.

2. The girl didn't listen. The ball did hit the window and the glass shattered all over.

3. And when the owner rushed out to see what happened, the girl who really broke the window blamed it on the other girl.
ANGER
1. The girl sitting down is playing with her new Mary Poppins doll. The girl standing up is watching her.

2. The girl who was watching is trying to grab this other girl's doll away.

3. The girl did grab and take away this girl’s new doll.

FEAR
1. This girl is picnicing with her family in a wooded forest. Her parents asked her to bring some water from the well near the road.

2. She seems to have taken the wrong turn because there is no road, only trees and more forest.

3. She is getting deeper and deeper in the forest. It is getting darker. Night is coming and she cannot even see where to go. She doesn't know how to find her way back.

FEAR
1. This girl sees a big dog. She does not know whether the dog is friendly or mean.

2. The dog begins to run after the girl. The girl tries to get away.

3. The girl is not able to get away and the mean dog is going to attack her.
APPENDIX C

EMPATHY SCORE SHEET

Child's Name ____________________________  Sex ____  Date of Birth ____________  Date ____________

SIBLINGS:

Age  Sex  Handicap

__________________________  ____________________________  ____________________________

__________________________  ____________________________  ____________________________

__________________________  ____________________________  ____________________________

VARIABLE  RESPONSE  AFFECT SCORE

Happiness

Sequence #1  ____________________________  ________

__________________________  ____________________________

Sequence #2  ____________________________  ________

__________________________  ____________________________
<table>
<thead>
<tr>
<th></th>
<th>Sequence #1</th>
<th>Sequence #2</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sadness</td>
<td></td>
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</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td></td>
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</tbody>
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*Note: The table contains empty cells for sequences.*
APPENDIX D
SUMMARIES OF FAMILY INTERVIEWS

FAMILY INTERVIEW #1 - The S. Family

Members of the S family include: Mr. S., a successful insurance executive; Mrs. S., a part-time secondary school teacher; Shanna, age 8, Christina, age 7, Lauren, age 5, Katie, age 3. Katie was born with Peter's Anomaly, characterized by congenital blindness and developmental delay. Katie is now 3 years old and is functioning at the lower end of the moderately retarded range of intellectual development. She has had numerous unexpected complications from this genetic disorder. At 6 months of age she had a tracheotomy and her life has been filled with other respiratory ailments as well as the typical characteristics of the retarded child—self-stimulatory behavior, oral motor problems, little receptive or expressive language.

1. Remembrance of Discovery of the Diagnosis

Shanna and Christian vividly recalled the anticipation associated with Katie's birth. They had been too young to remember Lauren's birth, but recalled that they were eager to have a new baby sibling. Lauren, who was 2 at the time of Katie's birth, did not recall events surrounding the birth.

Shanna and Christian both said that they were surprised by their father's initially subdued reaction after Katie was born. They had assisted in preparing the nursery and looked forward to their father's return from the hospital.

It had been noted within hours after Katie's birth that she would require neonatal ophthalmological services from the Johns Hopkins University Medical Center. She was transferred as an emergency patient to Hopkins. Mr. S. informed the children that there was a problem with Katie's eyes and that the possibility of other problems was not yet known.
Christian recalled, "When I found out that something was wrong with Katie I looked at Shanna and I didn't know what to say. I wasn't sure. I thought something bad was going to happen... I was kind of scared." Fear was the chief reaction mentioned by Shanna also.

The most pronounced problem for Christian and Shanna that Katie experienced was the tracheotomy, performed at 6 months of age. While the blindness appeared distressing to them, the tracheotomy caused a sense of crisis and raised the possibility of impending death. Christian stated, "I thought she was going to get a hole in her neck and it sounded scary."

2. Parental Explanations and Remembrance of Immediate Post-Discovery Period

Shanna and Christian claimed that they had little memory of their father's explanation of Katie's blindness. They did recall that he cried as he discussed Katie's condition with them. The observation of their father's distress was the most eventful aspect of this period.

The tracheotomy episode was remembered as the most disturbing element of Katie's disorder. The children had become accustomed to Katie at that point and there was great fear as to the physical harm that Katie might experience. Christian stated, "I thought she was going to die." Apparently, the crisis aura surrounding this period prohibited Mr. and Mrs. S. from offering an adequate explanation to the children. Mr. and Mrs. S. were also uncertain about Katie's health at this time.


The S. Children delineated several influences that Katie had on their lives. They frequently mentioned that they had to assume more responsibility for their own welfare, that they had to assist their
mother in household chores, that they learned how to care for Katie and assist in the suctioning that had to be frequently performed.

They were saddened that their parents could rarely accompany them to their extracurricular activities. Lauren, who always accompanied her mother and Katie to their sessions at Hopkins remarked, "The other kids went to nursery school. I went to the hospital."

The children seemed proud of their ability to work with Katie and mentioned that they knew more about handicapped children than any of their friends.

4. **Evolution of Feelings of Siblings Toward the Handicapped Child**

There was a mixture of fierce loyalty to Katie, a sadness that she was unlike other children and a faint hope that her development would accelerate.

Shanna and Christian stated that Katie assumed a special role in the family after the tracheotomy experience. They often felt that her life was in jeopardy and they listened carefully to her breathing. They said that her parents continuously kept them informed about the doctor visits.

Shanna and Christian related incidences in which they challenged the opinion of neighbors or friends when Katie's development was viewed disparagingly or curiously.

Although there was an air of cheerfulness throughout the interview all three children said that there was a pervasive sadness when they thought about Katie. Christian stated, "I think a lot of other people have different problems than we do. They could never imagine how many problems we go through. They do think I'm just a normal person. They don't know how hard it is with Katie." When Shanna was asked to
describe one word that made her different from her friends because of Katie she said, "Feelings." When asked to identify these feelings she said, "Sad."

Lauren, who had witnessed the various ophthalmological procedures and suctioning said, "Sometimes I think that they'll give Katie a shot and she'll never wake up and then she would never be able to make noises, never walk and never be able to get out of the hospital ... That makes me sorry and sad."

5. Impact of the Handicapped Child on Peer Relationships

There was disagreement by Shanna and Christian as to how Katie had affected their peer relationships. Shanna indicated that she was fairly circumpsect with her friends. She rarely spoke with her friends about Katie and disliked when they asked her questions. She said, "Well I don't really talk about it a whole lot. They [the other children] don't really know about it other than Colleen [her friend]. She talks about it sometimes and she spreads the word."

Christian often told his friends about Katie. He enjoyed their questions and appeared to be proud that he was able to respond to their queries with a fair degree of technical knowledge. Christian appeared to alternate between enjoying the attention of his classmates and recognizing the gravity of Katie's condition. Shanna appeared to separate her social and home lives by rarely inviting friends to her house. Christian said that he never restricted having friends to his home because of Katie.

Lauren had the most difficult time relating Katie's condition to her friends because most of them found the situation incomprehensible. Her agemates had such limited understanding of illnesses and
hospitalizations that Lauren said that she constantly had to explain Katie's problems to them. But these frequent explanations were difficult for her. She said, "If I go around telling people about it I might feel a little sad or something. I might start thinking about it and getting sad."


Although interview questions did not specifically focus on the construct of empathy, several important themes pervaded the discussion. One theme was the childrens' continued restatement that Katie's problems enabled them to appreciate the misfortunes of other people. They related stories about friends who ridiculed handicapped people and noted that Katie's problems had sensitized them to misfortunes in general.

Another theme involved the frequent attempt for the children to try to understand how it feels to be blind or to have respiratory problems. Lauren said, "When she was in the hospital I thought--how does it feel to be very little, to be blind? . . . . Some things like the flower or the dandelion, that's very pretty and like if she was blind and she was little and couldn't see, that I would feel sad."

7. Expectations of the Handicapped Child for the Future

There were recurrent contradictions as the children attempted to envision Katie's future. On the one hand they sometimes minimized her problems ("I feel like she's normal person except that she just doesn't know as much as most 2 year olds would know" - Christian) and on the other hand, they sometimes reluctantly acknowledged that Katie would remain developmentally delayed.

Since she was the youngest child in the family they could persist in maintaining that she was only a baby and would eventually mature.
Yet for Shanna and Christian the memory of Lauren at 2 years of age and the existence of a neighbor who is Katie's age made these assertions difficult to state with confidence. They were beginning to recognize that Katie's problem would remain, that this was a chronic condition. Lauren simply thought of Katie as a baby and evidenced little comprehension that the 2 year old neighbor was the same age as Katie.

8. **Role of the Handicapped Child in the Future Life of the Siblings**

The S. children had not yet discussed Katie's future life. They knew that she would enter a day school program in the fall and they were pleased that she would be exposed to an intensive educational program. There was the hope that the school would rapidly accelerate her development. This was countered by an emerging understanding that the school was for retarded children and the retardation would not go away.

They said that they would continue to help with household duties as well as Katie's medically related needs. There was no speculation about Katie's life after they had all become adults or when their parents were no longer able to care for her.
FAMILY INTERVIEW #2 - the J. Family

Members of the J. family include: Mr. J., a fireman; Mrs. J., a homemaker; Diane, age 8; Joanne, age 7; and Robert, age 3. Robert has cerebral palsy and is severely retarded. He is currently functioning at an 8 to 10 month level. He has been an inpatient at the John F. Kennedy Institute for Handicapped Children and has been involved in an early intervention home-based program. He has required the services of special education, speech pathology, physical therapy and occupational therapy.

1. Remembrance of Discovery of the Diagnosis

   Robert was diagnosed with cerebral palsy at 4 months of age. Joanne and Diane related that they suspected that he had a problem prior to the formal diagnosis. Joanne, the more outspoken sister, said that she knew something was wrong because "he was moving his head back and forth and we didn't know what he had." She remembered that, "My father took him to the doctor and the doctor said that there was nothing wrong with him. Next day we took him to a different hospital and they said that he had cerebral palsy."

   Both Diane and Joanne said that they cried when their parents told them of the diagnosis. They both had a feeling of dread—that something terrible would afflict their brother. Initially they didn't discuss the diagnosis with anyone and they said that they hoped that it would turn out to have been a mistake.

2. Parental Explanations and Remembrance of Immediate Post-Discovery Period

   Diane said that cerebral palsy was described as "some disease." It appeared to have an almost mysterious air to it since they were told that Robert would not behave like any of the children whom they knew. The fact that they had no source of comparison enhanced the problem. No explanation of the etiology or future course of the disorder was apparently provided.
Joanne said that her parents told her, "He'll be strange and you might not understand him but don't laugh at him if he talks funny."

3. Evolution of Impact of the Handicapped Child on Family Life

Joanne and Diane said that Robert's condition had compelled the family to go to physicians frequently, particularly to the Kennedy Institute in Baltimore. They said that they worked with him often and that they learned to appreciate small increments of progress.

Joanne did say that "Our family is the one that has a little brother with a little disease." Both girls said that they were not like a normal family. When asked how things would be different if theirs was a normal family they said that "Everything would be okay." On another occasion Joanne said that, "If nothing was wrong the whole world would be very happy, if there was no disease like cerebral palsy."

4. Evolution of Feelings of Siblings Toward the Handicapped Child

Joanne and Diane evidenced a fierce loyalty and protectiveness toward their brother. They tended to speak as if they were junior parents and he was their common son. They emphasized how they work with him and become angry when anyone makes a negative comment about him.

They were quite aware of the tasks associated with his current developmental level. Joanne said that it made her happy "that he learned how to clap his hands and say 'mamma' and 'dadda.' . . . He's doing all kinds of stuff. He's walking up the stairs, crawling."

There was no mention of any restrictions on family activities or excessive parental attention devoted to Robert.

5. Impact of the Handicapped Child on Peer Relationships

Joanne and Diane indicated that Robert's disorder had a pronounced impact on peer relationships. Their reaction, upon learning of the
diagnosis, was not to tell any of their friends. Both girls eventually confided in several close friends. The breach of confidence of one friend prompted to tell the girl—"I ain't gonna be your friend for telling. You can't keep a secret."

The theme of retaining a mysterious secret was frequently mentioned during the interview. The fact that Diane and Joanne are unacquainted with other cerebral palsy children makes their uniqueness that much more distressing. There seemed to be a fear that some of the potentially unkind remarks of the other children might have a basis in reality. The best way to remain free of attack, then, is to encase Robert's cerebral palsy in a shroud of privacy.


A comparison of Robert's disorder with the problems of other people was often mentioned. The girls said that one friend who has been diagnosed as hyperactive and "must take special pills" and another friend who is a diabetic and "can't eat any sugar" understand Robert's problems.

Joanne mentioned a television program that they had seen about a woman who successfully cared for an individual with a range of problems similar to Robert's disorder. "The man was almost dying and the woman teached him. He needed a good mother to help keep him alive. She taught him how to dance, walk and sing. He knows how to sing good now. Now he knows how to eat."

Diane and Joanne explained that it was important to understand that each person is different and "for some they won't walk until they're 6 or 7."
7. Expectations of the Handicapped Child for the Future

There was a significant contradiction in the view that Diane and Joanne maintained of their brother's future. They expect him to "grow out of it" and even mentioned that a miracle seems quite probable. Yet they also recognized the extent of Robert's delay is such that he will not be a normal adult. Joanne provided a fascinating statement of this contradiction, "When he grows up he's going to be special. Cause he knows how to do a lot of things now but last time all he knew was how to talk a little and say 'mamma' and 'dadda.' We know that when he grows up he's going to be the best little brother we ever had. The best child we ever had."

8. Role of the Handicapped Child in the Future Life of the Siblings

Both Joanne and Diane said that they wanted to enter professions to help "people who have got diseases like my little brother." Diane specifically wanted to become a nurse. There was no mention by the girls that they expect their brother's condition to warrant continued dependency. There was only vague reference to the presumably better life "when we all grow up."
FAMILY INTERVIEW #3 - The K. Family

Members of the K. family include: Mr. K., a United States government civil servant; Mrs. K., a part-time nurse; Jody, age 6; Joey, age 3. Joey contracted spinal meningitis shortly after birth. He was hospitalized for the first month of life and was discharged with a guarded prognosis. Development was significantly delayed during the first year. He has had intensive physical, occupational and speech therapy. He is able to walk when braced with a walker. Expressive speech is still limited to single words although his understanding of language is not as delayed. Cognitive skills appear to be delayed but is quite likely that Joey will function in the slow learner to mildly retarded range. This prediction of his cognitive ability represents a departure from prognoses that were made as recently as 8 months ago.

1. Remembrance of Discovery of the Diagnosis

Since Jody was three years old at the time of her brother's birth her recollection of that period was fairly vague. She said that it was an exciting time because the family was living in California and immediately after Joey's birth she lived for two weeks with her favorite aunt and uncle. Jody's nursery school schedule remained uninterrupted during this first hectic month of Joey's life.

Jody recalled that her parents said that she would have to be particularly helpful with Joey. Mrs. K. told her that they would have to act as his nurses as well as his mother and sister. Since Jody was accustomed to seeing her mother in a nurses uniform, this seemed to be a logical role. Jody said that she prepared her play stethoscope "so I could help the baby."

2. Parental Explanations and Remembrance of Immediate Post-Discovery Period

Jody recalled the disruptive events surrounding the changes in her brother's condition during the first few weeks of his life. Following discharge from the hospital Joey had to be readmitted under emergency conditions several times. During one particularly critical time the Military Police provided transportation to the hospital. This was seen
as an exciting time for Jody. She remarked that her nursery school teachers frequently gave her special attention, and asked her questions about Joey. She said, "And every night mom and dad brought me a present. They said that Joey got it for me."

The explanation that Joey would need special help and that Jody would have to participate in his care seemed to satisfy her.


It was difficult to discern a particular impact that Joey had on the life of the K. family from Jody's perspective. The ambiguous nature of his prognosis probably made it difficult for the family to convey a sense of future developmental expectations.

Jody attended physical and occupational therapy sessions at various hospitals in California and in Baltimore, following the family's relocation to Maryland. She said that she enjoyed learning how to help her brother during these sessions. Mrs. K. encouraged her daughter's participation in these activities and Jody confidently stated, "I learned what to do to help him walk." The K. family enrolled Jody in a nursery school program as soon as they moved to Maryland. Jody engaged in her own activities in addition to those that centered on her brother.

4. Evolution of Feelings of Siblings Toward the Handicapped Child

The K. family rarely restricted their leisure-time activities because of Jody's disability. The family often went to the zoo and other amusement areas. Jody happily recalled the details of these trips.

Jody found it difficult to respond to the author's questioning about what her life would be like if Joey didn't have braces and could
do the things that other three year olds could do. "But this is always how Jody has been."

5. Impact of the Handicapped Child on Peer Relationships

Jody said that her friends enjoy playing with Joey. Because the family has lived in their present neighborhood since Joey was six months old Jody's friends are accustomed to her brother. She said that "They sometimes come over to see that he has learned something new. I like to show them his new chair or braces. Joey likes to be with them."

There was no indication that Jody had encountered problems with peers because of Joey's handicap.


Joey continuously emphasized that she was pleased when Joey had accomplished a new skill. She said that "Some children don't learn things as fast as other children. But that's okay. Some children need physical therapy."

She expanded this theme on several occasions, remarking that "You shouldn't make fun of people because they can't do stuff. Some people can't do stuff that other people can do, but that's okay."

7. Expectations of the Handicapped Child for the Future

Jody focused on the short-term future when discussing Joey's projected life. She said that she thought he would soon be able to walk without braces and that he would begin to use an increasing number of single words. She remarked that he would "be fine when he goes to kindergarten." She was unable to imagine how their lives would change beyond the next two to three years.
8. *Role of the Handicapped Child in the Future Life of the Siblings*

Jody related that she expected she would continue to assist Joey in his development. She remarked that "as soon as he can walk and talk, he'll be okay" and it was thus incomprehensible to her that Joey would require special programming "once he is as old as me."

Jody said that she looked forward to playing with her brother "when I can run after him."
FAMILY INTERVIEW #4 – the B. Family

Members of the B. family include: Mr. B., a high school teacher; Mrs. B., a homemaker; Michael, age 13, Patrick, age 11, Christopher, age 6, Shawn, age 5; Sam, age 3. Sam was born with Downs Syndrome and is currently functioning in the moderately retarded range of intellectual development. He has been involved in developmental stimulation programs since six weeks of age. His general health has been satisfactory and he has required only regular pediatric care. The B. family has participated in numerous civic and church activities. Mrs. B. has been an ardent advocate of early intervention services.

1. Remembrance of Discovery of the Diagnosis

Michael and Patrick had vivid recollections of Sam's birth. They said that they had become quite accustomed to their mother's pregnancies and deliveries. There was little excitement about the prospect of a new baby in the family. Michael said that he felt as if having two young children in the family would compel him to accept an increasing number of domestic responsibilities. There had been much speculation by the three older boys as to how they would react if their mother gave birth to a girl. The imagined consequences of that possibility were their main thoughts prior to their mother's delivery.

Michael, who often served as spokesman for his brothers, said that he thought there was a problem because Mr. B. didn't telephone the family from the hospital about the baby's birth. Instead, Mr. B. came home after the delivery and said nothing about Sam. Mr. B., as Michael recalled, spoke with his mother who was caring for the boys and then spent several hours in his room. Their grandmother told the boys that Mr. B. was "napping" and encouraged them to go outside and play.

Michael and Patrick said that they concluded that the baby must have died. They wondered whether their father would tell them about it and were concerned about what to say to their mother when she returned
home. They decided to clean the house so that their mother would be pleased when she did return.

Since the boys became convinced that the baby had died it was quite surprising when their father told them the next day that they had a new brother who had Downs Syndrome. Patrick said that they immediately knew that Downs Syndrome "was some bad disease" since their father had been so secretive during the previous day. They recalled that he discussed genes and chromosomes with them, but they had little understanding about the meaning of his explanation.

The B. boys said that they were told that Sam would develop at a slower rate than the other children. That didn't seem to disturb them since, as Patrick said, "he was only a baby anyway."

2. **Parental Explanations and Remembrance of Immediate Post-Discovery Period**

The first six weeks of Sam's life were recalled as a particularly trying time. Mrs. B., who had heretofore been a tower of strength for the family, was in a sustained depression. Michael and Patrick found their mother's behavior unprecedented and felt that they had to do something to help her. Patrick said, "It was kind of strange. Sam didn't seem any different than Shawn. But everybody was sad all the time. People kept calling mom. It was so different this time. Michael, Christopher and I didn't know what we should do. So we justed stayed out of mom's way."

When Sam was about two months of age their family life became more typical of what it had been like before Sam's birth, recalled Michael. He said, "I remember that I came home and mom was real mad. The teacher had called to tell her that I hadn't done my homework. Mom got mad. I
was happy. It was the first time in a long time that mom seemed to care about anything."


The four B. boys explained that Sam soon assumed a prominent place in the family. Christopher said, "From the beginning he was special."
The entire family became involved in the early intervention program.
"We learned how to help him roll from his back to his tummy when he was two months old," said Christopher.

Michael stated that Sam "became a child of the family rather than just a child of mom and dad. We all took turns doing things with him."

The boys didn't feel that Sam restricted their activities since their schedules were fairly well established and they generally continued to engage in the same pursuits as they had done previously.

Michael and Patrick did criticize their mother's involvement in a host of activities related to issues concerning retarded children. Patrick related, "Mom always has to go to meetings now. Like almost every night she goes somewhere." There seemed to be considerable discussion about Mrs. B.'s activities in the family. Michael said, "It's not Sam--it's mom that changed this family."

The B. children voiced resentment that they had to babysit for Sam so that their mother could attend meetings. Michael also felt that his father was not sufficiently involved in Sam's care.

4. Evolution of Feelings of Siblings Toward the Handicapped Child

All four boys said that they felt very positively toward Sam. Patrick said that he had become the "mascot" of the family. Christopher acknowledged that "we shouldn't let him get away with things. We have to treat him like he's normal."
The idea of treating Sam as if he were a normal child and of placing appropriate demands on him was an often-repeated theme. The boys said that this was something that their mother had repeatedly instructed them to do.

Michael said that sometimes he resented Sam "because he makes mom work a lot." But he also said that all the boys are pleased when Sam learns to do something new. "We didn't think about it much with Shawn. He just did what babies do. Now we can see al the things that go into walking and talking."

5. Impact of the Handicapped Child on Peer Relationships

All four boys said that their friends enjoy playing with Sam when they visit the B. home. Shawn said that his friends have no idea that Sam has any special problems. Michael stated that he became angry when a neighbor teasingly called Sam "retarded." He acknowledged that people "now watch what they say around us."

Patrick said that all of the children in his class are aware of Downs Syndrome because he gave a presentation on the genetic disorder. He felt that his friends would have a better understanding of Sam's problem and would not have the need to ask him questions.

Michael and Patrick said that they were proud to have Sam accompany them to Little League practice. They both said that he enjoys watching them play baseball.


Michael and Patrick mentioned that they had developed an increased understanding for people with problems because of Sam. Michael said, "I've learned how to be more patient. There is a kid across the street
who is my age and he has a normal three year old brother. But he has no patience with him. He doesn't help him or do things with him."

Christopher said that he believed that people who couldn't do things that other people were able to do would feel badly. He said, "It must make you feel bad if everyone else can talk and you can't talk."

Shawn related that he had problems learning to swim as well as his friends "and I thought that Sam will have a hard time too and that made me sad."

7. **Expectations of the Handicapped Child for the Future**

Michael and Patrick said that their parents had taken them to see older Down's Syndrome individuals so that they could begin to prepare for Sam's later development. Yet while they recognized that Sam's development would remain delayed they insisted that he would profit markedly from enrollment in early intervention programs and from the encouragement of a supportive family.

Michael spoke enthusiastically about the developmental gains that children could experience from special educational programs. He said that the family "would make sure that Sam could learn everything possible."

Christopher and Shawn made vague references to the expectation that Sam would be "slow" but they maintained that he would mature and become a competent adult.

8. **Role of the Handicapped Child in the Future Life of the Siblings**

Michael was the one member of the B. family who claimed to have thought about this issue. He indicated that Sam may be dependent as an adult and he recognized that his parents may not be able to care for him at that time. Michael said that he was prepared to have Sam live with
him "because I would never let him go to a mental hospital or something like that." Michael was knowledgeable about group homes and sheltered workshops and he said that he hoped that Sam could reside in such a facility. Yet there was also an attitude of resignation about Sam’s future. "If he has to live with me, what can I do?"

Michael admitted that Sam had an impact on his vocational plans. He said that he wanted to go to college and "then work with retarded children . . . I'm good at it. I know what to do." He said that he wanted to be certain that his adult life could include Sam, if that became necessary.

Michael also volunteered some advice for other families with handicapped children. "1) Accept it. The sooner you accept it, the better. 2) Understand where he's coming from. 3) Treat him as normally as possible. 4) Teach him things. The sooner he learns little things, the sooner he'll learn big things."
FAMILY INTERVIEW #5 - The E. Family

Members of the E. Family include: Mr. E., who works for an accounting firm; Mrs. E., a homemaker; Michael, age 16, Eric, age 12, Sean, age 5, Erin, age 2. Erin has a congenital respiratory problem of unknown etiology. Erin has required extensive medical treatment and by their own admission the doctors are baffled by her condition. Her health is always in jeopardy. The E. Family has been advised that if she is not suctioned as soon as she gags, her life could be threatened. Mrs. E. has insisted that Erin remain at home and only be hospitalized during those times when it becomes absolutely necessary.

To ensure that Erin can be cared for at home the family has purchased sophisticated hospital equipment and frequently has round-the-clock nurses. Mr. E.'s generous medical insurance policy pays for these services which currently cost about $200,000 annually. Erin's condition is also characterized by developmental delay.

1. Remembrance of Discovery of the Diagnosis

The E. children had different memories of Erin's birth and hospitalization experiences. Sean simply recalled that "we're always going to the hospital." He had few memories that preceded Erin's birth. The special equipment and nurses were regarded as normal aspects of the environment.

Michael and Erin both said that it was difficult to recall a single incident which prompted them to consider their sister as "special." The events of the past two years were an unfolding, an ongoing time in which they became increasingly convinced of Erin's unpredictable daily life.

Eric said that they have become "used to watching her to see if she is choking. It's no big deal now. We know what to do."

2. Parental Explanations and Remembrances of Immediate Post-Discovery Period

Michael and Eric explained that they had frequent discussions with their mother about the perplexing nature of their sister's condition. Eric said that they were hopeful that there would be a definitive diagnosis. The etiology of the problem no longer concerned them and
they said that they now just accepted that "things are crazy around here."

Michael and Eric emphasized that family life had changed radically since Erin’s birth and the major problem was just wondering what could happen each day.


Michael and Eric stressed that their daily lives had altered greatly in the past two years. Michael, who had recently obtained his drivers' license, said that he now had more control over his life because he was able to be less dependent on his family. Eric said that family life was frequently "overwhelming" and that the fluctuations in Erin's health consumed all of his mother's time and attention.

Eric stated that Erin had become the center of the family. Activities could never be definitely planned. Eric said that "you learn to tell people that you could do a certain thing if everything is okay. And you never know if everything will be okay."

Eric also spoke with remarkable sophistication about the financial impact of Erin's medical needs. He explained that Mr. E. was required to work to an excessive degree but that he could not seek other employment because of the insurance benefits associated with his job. Eric said that this made Mr. E. angry and that he was often short-tempered with his family.

Since Sean had no source of comparison with life before and after Erin's birth, he had little perspective as to how his life could be different. He appeared to be especially fond of Eric and Eric said that he attempted to play with Sean when he returned home from school each day.
4. **Evolution of Feeling of Siblings Toward the Handicapped Child**

The E. children had a variety of feelings toward their sister. Sean repeatedly expressed exasperation that he had to restrict his play with her. He said, "Sometimes I like to play with her, but sometimes she gets real sick so I go out and play with somebody else."

Eric remarked that Erin was important in the family and especially to Mrs. E. He said that sometimes he thought that Erin could die and that scared him.

Michael seemed detached from Erin. He said that he enjoyed his independence and was more interested in dating and sports than anything else at this time. His main family-related problem, he stated, was his deteriorating relationship with his father. He complained that the demands of Mr. E.'s job made his father tired and angry when he returned home.

5. **Impact of the Handicapped Child on Peer Relationships**

All the E. children said that their friends enjoyed visiting Erin. They encouraged their friends to ask questions about Erin's condition and had acquired sufficient technical knowledge to inform them about the purposes of the special equipment. Michael and Eric said that their friends also enjoyed meeting the nurses, although Eric said that "all this stuff sometimes blows their minds."

Eric indicated that the main impact that Erin had on peer relationships was the fact that her condition exacerbated the uncertainty of their lives. Plans had to remain tentative and he found this annoying.

Eric appeared to be greatly influenced by Erin's medical condition. He talked about the need for more research and said that Erin had helped him to "appreciate each day because around here we have to take one day at a time."

Michael said he "felt sorry" for Erin and was concerned that her breathing made her life so unpredictable. But it did not appear that Erin had much impact on his daily life or views.

Sean said that "I wonder how it is not to catch your breath and to need a machine to breathe sometimes."

7. Expectations of the Handicapped Child for the Future

The unpredictability of Erin's condition made thoughts of the future in a long-term perspective difficult for Michael and Eric. Eric was chiefly concerned with Mr. E.'s relationship to the rest of the family. He feared that the work and home-life pressure could contribute to extremely strained relations. He also feared that the delicacy of Erin's condition could not continue forever. He and Michael remarked that unexpected research discoveries could dramatically alter the situation.

Michael alluded to the hope that Erin's health would improve. The pre-eminence of her medical condition overshadowed any thoughts about the potential consequences of Erin's developmental delay.

8. Role of the Handicapped Child in the Future Life of the Siblings

Michael and Eric both indicated that they could not envision their future role in their sister's life. They emphasized that they had decided to only look at the short-term. There was too much that remained unknown about Erin's physical condition.
FAMILY INTERVIEW #6 - The C. Family

Members of the C. Family include: Mr. C., a plumber; Mrs. C., a homemaker; Jennifer, age 5; Michael, age 3. Michael has cerebral palsy and is currently functioning in the moderately retarded range of intellectual development. The diagnosis was made at the age of 8 months. Although Michael has required early intervention services, he has not needed an unusual amount of medical attention.

1. Remembrance of Discovery of the Diagnosis

Jennifer verbalized a few recollections of her brother's birth. She said that she remembered that her grandmother came to stay with her and that she went out to dinner with her father.

She knew that her brother had cerebral palsy but she was unable to recall when she learned about it. She said, "That's how he was borned."

3. Parental Explanations and Remembrance of Immediate Post-Discovery Period

Jennifer said that she remembered that her mother explained that Michael "would do things slower than other kids." Jennifer remarked that "Michael has something in his brain that doesn't work right." She emphasized that he has recently begun walking "and he wears a helmet that helps him."


Jennifer said that she enjoyed playing with Michael but sometimes "he gets into my things." She could not recall any events or feelings that made it seem that her family's experiences were different than those of her peers.

4. Evolution of Feelings of Siblings Toward the Handicapped Child

Jennifer said that she "likes to take care of Michael and show him how to say new words." She did not indicate any strong positive or negative feelings toward Michael.
5. **Impact of the Handicapped Child on Peer Relationships**

Jennifer said that her friends enjoyed playing with Michael. Mrs. C. was usually able to transport Jennifer to the homes of friends who did not live in the immediate neighborhood. Michael's handicap did not seem to restrict Jennifer's activities.


It was difficult to assess how Michael had influenced Jennifer's life. She did not relate any incidences or express any feelings that permitted an evaluation of empathy.

7. **Expectations of the Handicapped Child for the Future**

Jennifer said that she was happy that Michael was walking and she wanted him "to start talking more." There was little comprehension that there was a cognitive component that would continue to retard his development.

8. **Role of the Handicapped Child in the Future Life of the Siblings**

Jennifer stated that she looked forward to the time when her brother would go to school so that she could walk with him and "show everyone that I'm his big sister." There were no future references beyond that period of time.
SUMMARY OF FAMILY INTERVIEWS

1. Remembrance of Discovery of the Diagnosis

The age of the siblings at the time of the handicapped child's birth was an important variable in how this period was recalled. The older children in Families 1 and 5 had specific memories of the events surrounding the birth. It appeared that children who were five years and older could recall details of the child's birth and the immediate family impact. The younger children displayed egocentric reactions, focusing on how this period influenced their schedules.

When the diagnosis was accompanied by physical problems (Families 1 and 5), the siblings appeared to experience a sustained period of fear and bewilderment. There was an uncertainty as to what would happen to the child. This immediate crisis atmosphere seemed to be more troublesome than considerations about the long-term consequences of the diagnosis.

General feelings identified included: fear; dread; concern about changes in parental behavior; and the hope that the diagnosis was a mistake.

2. Parental Explanations and Remembrance of Immediate Post-Discovery Period

The older children (Families 1 and 4) were chiefly concerned about the initial changes in their parents' behavior. Their father's distress (Family 1) and mother's depression (Family 4) was a departure from their usual interaction style. The younger children were apparently unaware of any change in their parents' moods.

The siblings in Families 2, 5 and 6 regarded the diagnosis as something mysterious and received medically based explanations that
didn't seem to make much sense to them. Siblings in Families 3 and 6 were told that the new baby would receive "special help" and they were vaguely enlisted to assist in these efforts.

In Families 1 and 5 there was an overwhelming feeling of uncertainty and a fear for the child's possible death.


Several themes were delineated by the siblings. The older children (Families 1, 4 and 5) said that they now had greater personal independence because of the family's focus on the handicapped child. Yet while there was less parental questioning about what they did during their leisure time the siblings also said that they now assisted more with domestic responsibilities. Siblings in Families 1, 3, 4 and 5 said that time was also spent in caring and working with the handicapped child. The unpredictability of their sister's condition promoted a feeling of the handicapped child as the center of family life for the siblings in Family 5.

There was dissatisfaction that parents were less involved in the extracurricular activities of siblings (Families 1, 4 and 5). This was expressed by the older children who were able to compare their parents' involvement in their activities before the birth of the handicapped child. The amount of parental time spent with the handicapped child sometimes caused intra-family strife.

When the child's physical condition did not warrant an appreciable change in the family's daily life there did not appear to be an interruption in regular family activities (Families 3 and 6).

The siblings in Family 2 indicated that they had learned to be grateful for their brother's incremental progress. They also said that
they felt that they were not a "normal" family. This feeling of viewing
the family as special or different was mentioned also by the siblings in
Family 4.

4. **Evolution of Feelings of Siblings Toward the Handicapped Child**

   Ideas that were expressed on this topic included: a special
   loyalty to the handicapped child (Families 1, 2 and 4); protectiveness
   toward the child (Families 2 and 4); as well as a pervasive sadness
   (Family 1); expectation of an eventual cure (Families 1, 2, 5, 6) and a
   fear of the child's death (Families 1 and 5).

5. **Impact of the Handicapped Child on Peer Relationships**

   The siblings in Family 1 disagreed as to how their sister's
   handicap influenced peer relations. One of the two older children found
   that he enjoyed the questions and interest his friends evidenced toward
   the handicapped child. The other child remained reticent in discussing
   her sister's condition with peers. Siblings in Families 4 and 5 also
   said that they were pleased by the special attention their family
   received from the friends; while siblings in Family 2 restricted
   invitations to their home because of their sibling's handicap.

   Siblings in Families 2 and 4 feared that if classmates knew the
   handicapped child they would either taunt the disabled child or taunt
   the siblings.


   Two ideas were frequently repeated. The first theme, usually
   discussed by children above the age of six, focused on an appreciation
   of the misfortunes of other people. These children seemed to elevate
   their experiences beyond the immediate problems of their handicapped
brother or sister and invoke a general theme that transcended the actual situation. This was noticed in Families 1, 2, 4 and 5.

The younger siblings wondered how it would feel to be afflicted with the particular disability. They restricted their reactions to the handicapped sibling in particular rather than disabled people in general.

7. **Expectations of the Handicapped Child for the Future**

All the siblings stated that the handicapped child would improve markedly in the future. While the older children in Families 4 and 5 seemed to recognize reluctantly that the disabled child would not be a normal adult, there was generally persistent thinking that new research or some miracle treatment would enable the handicapped child to be cured. For children of six years and below there was little comprehension of the "future" when all the children in the family would be adults. These younger children believed that the handicapped child would be cured by conventional school age.

8. **Role of the Handicapped Child in the Future Life of the Sibling**

In five of the six families there was no mention of any continued dependency by the handicapped child when that individual reached adulthood. The siblings did not see themselves in a care-providing capacity in later life. Only in Family 4 was there discussion about this possibility. The eldest child in that family said that he envisioned a time when his parents could no longer care for his younger brother and he would undertake that responsibilities.

Siblings in Families 2 and 4 mentioned that the disabled child had had an impact on projected vocational choice. They indicated that they planned to enter professions in which they could work with children who
had problems that were similar to the handicapped child in their families.
APPENDIX E

STRUCTURED INTERVIEW USED WITH SIBLINGS OF RETARDED CHILDREN

Developed by Caldwell and Guze, 1960

1. When did you first become aware that there was anything 'different' about X?
2. What did you notice?
3. How did you feel at the time?
4. What explanations did your parents give you?
5. Did the explanation satisfy you?
6. Did you talk to anyone else about it?
7. Do you think X understands anything about his condition?
8. Does X ask questions about why he can't do certain things other children do?
9. What do you think is the ideal way for parents to handle the explanation to brothers and sisters?
10. Have your friends asked questions about X?
11. What do you tell them?
12. Do you think you have fewer friends because of X?
13. Do all the brothers and sisters in the family react pretty much the same way?
14. Do your mother and father feel about the same way you do?
15. There are probably some good and some bad effects on the family when there is a handicapped child in the home. Tell me some good effects that X has had on your family.
16. Now tell me some of the bad effects.
17. I want you to tell me honestly whether you think it is better for children like X to live at home or in some kind of training school or state institution.
18. What do you think would happen to X if something happened to your mother and father?
19. Tell me something that happened recently in connection with X that made you very unhappy or mad.
20. Now I want you to tell me something that happened recently in connection with X that made you very happy or pleased you a great deal.

21. Are there any other comments you would like to make?
## APPENDIX F

**BREAKDOWN OF SCORES OF INDIVIDUAL CHILDREN**

*siblings of the nonhandicapped*

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