



THE UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE

SIBLINGS OF HANDICAPPED CHILDREN:  
THEIR ATTITUDES AND LEVEL OF PERSONAL/SOCIAL ADJUSTMENT  
AS RELATED TO CERTAIN CHARACTERISTICS  
OF THE HANDICAPPED CHILD

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By  
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## TABLE OF CONTENTS

	Page
List of Tables . . . . .	vii
Abstract . . . . .	1
Chapter I: Introduction . . . . .	3
Problem Statement . . . . .	4
Purpose of the Study . . . . .	5
Research Hypotheses . . . . .	5
Operational Definitions . . . . .	7
Limitations of the Study . . . . .	7
Implications of the Study. . . . .	8
Chapter II: Review of the Literature . . . . .	9
Chapter III: Method . . . . .	44
Subjects . . . . .	44
Procedure . . . . .	44
Design and Analysis . . . . .	49
Chapter IV: Results . . . . .	51
Chapter V: Discussion and Conclusions . . . . .	62
Hypothesis 1 . . . . .	63
Hypothesis 2 . . . . .	68
Correlations Between Sibling Attitudes and Adjustment . . . . .	70
Conclusions . . . . .	72

	Page
Chapter V, continued	
Limitations of the Study . . . . .	72
Implications of the Study . . . . .	74
REFERENCES . . . . .	76
APPENDICES . . . . .	88
Appendix A: Sibling Attitude Scale . . . . .	88
Appendix B: Role Tension Behavioral Rating Scale . . . . .	94
Appendix C: Family Structure Questionnaire . . . . .	99
Appendix D: Consent Forms . . . . .	102

## LIST OF TABLES

Table		Page
1.	Subject Cell Assignment . . . . .	45
2.	Sample Items from SAS . . . . .	46
3.	Sample Items from RTBRS . . . . .	48
4.	Multivariate Analysis of Variance on Subject Scores on SAS and RTBRS (Pillai's Trace) . . . . .	51
5.	Analysis of Variance on SAS Scores . . . . .	52
6.	Sources of Variation in Analysis of Variance on SAS Scores . . . . .	53
7.	Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap . . . . .	53
8.	Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap and Relative Gender . . . . .	54
9.	Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap and Relative Family Position . . . . .	55
10.	Analysis of Variance on RTBRS Scores . . . . .	56
11.	Sources of Variation in Analysis of Variance on RTBRS Scores . . . . .	57



Table	Page
12. Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap . . . . .	58
13. Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap and Relative Gender . . . . .	59
14. Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap and Relative Family Position . . . . .	60
15. Pearson Product-Moment Correlation Coefficients for SAS and RTBRS Scores by Subject Cell(s) . . . . .	61

## ABSTRACT

This research examined the attitudes expressed by children toward their handicapped siblings, and the level of personal/social adjustment which they reported. Of particular interest was a comparison of sibling attitudes and level of adjustment reported by children with handicapped brothers or sisters with those reported by children with nonhandicapped siblings. Two self-report measures were constructed and used: (1) the Sibling Attitude Scale (SAS), based on the work of Helen Koch (1956), and (2) the Role Tension Behavioral Rating Scale (RTBRS), based on the personal/social correlates of role tension as described by Bernard Farber (1959).

Sixty children were included in the study: 20 siblings of nonhandicapped children, 20 siblings of mildly/moderately retarded children, and 20 siblings of severely/profoundly handicapped children. Each subject was living in a white, middle-class family, with both natural parents and no more than two siblings. The families were identified through their association with the public schools or private agencies specializing in early intervention services for the developmentally disabled.

A 3 X 2 X 2 multivariate analysis of variance (MANOVA) performed on subject scores on the SAS and the RTBRS suggested that the siblings of handicapped children expressed different attitudes and/or levels of personal/social adjustment than did siblings of nonhandicapped children. Neither the relative family position nor the relative gender of the handicapped child appeared to influence subject scores on either dependent measure.

The first set of hypotheses explored the relationship between sibling attitudes expressed by children with handicapped brothers or sisters with those expressed by children with nonhandicapped brothers or sister. A 3 X 2 X 2 analysis of variance (ANOVA) was completed, with results suggesting that siblings of handicapped children expressed more positive attitudes than did siblings of nonhandicapped children.

The second set of hypotheses explored the relationship between level of personal/social adjustment reported by children with handicapped siblings with that reported by children with nonhandicapped siblings. A significant main effect for sibling handicap was observed in the direction of poorer personal/social adjustment in children with handicapped brothers or sisters. Dunn's procedure for individual mean comparisons yielded results indicating a statistically significant difference between groups with regard to severity of sibling handicap, with children having mildly/moderately retarded siblings reporting lower levels of personal/social adjustment than did siblings of severely/profoundly handicapped children.

Results of the two ANOVA models, as well as analyses of the correlations between SAS scores and RTBRS scores were discussed in terms of their relationship to previous research in this area, and their implications for clinical intervention and future research.

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CHAPTER I

Introduction

The growing influence of family systems theory (Ackerman, 1958; Bell, 1975; Minuchin, 1976; Satir, 1967) has served to increase the attention given to the impact of the sibling subsystem on children's personality and social development. Children growing up in the company of their siblings often struggle to carve out unique identities, negotiate satisfactory filial relationships, identify family roles for themselves that will complement those of the other members, and expand their social sphere to include peer relationships outside the home (Adler, 1939; Bank & Kahn, 1982; Einstein & Moss, 1967; Koch, 1956, 1960; Pfouts, 1976). In the process of this struggle, they formulate general attitudes toward their siblings, and the impact they have upon them (Koch, 1956, 1960).

Children with handicapped brothers or sisters experience the competition, compromise, and emotional ambivalence which seem to characterize many sibling relationships (Bank & Kahn, 1982; Einstein & Moss, 1967; Pfouts, 1976). It has been suggested that such children also experience situations or feelings which differ in kind (Simeonsson & McHale, 1981) or degree (Featherstone, 1980)

from those which impact children with nonhandicapped siblings. It has also been suggested that siblings of handicapped children experience more role tension within the family, as evidenced by certain personal/social correlates, than do siblings of nonhandicapped children (Farber, 1959, 1960). The extent to which these special concerns impact and influence the family system remains open to further investigation.

Previous research in this area has produced conflicting results. Lavine (1977) and Schwirian (1976) found that the relationships established between handicapped children and their nonhandicapped siblings do not differ appreciably from those of control pairs of nonhandicapped brothers and sisters. Other studies (Cleveland & Miller, 1977; Farber, 1959, 1960; Gath, 1973, 1974; Lonsdale, 1978; McAndrew, 1976; Russell, 1980; Tew & Laurence, 1973) have suggested that children with handicapped siblings present unique behavioral, emotional, and attitudinal problems.

### Problem Statement

If children who grow up in the company of handicapped brothers or sisters experience special conflicts, feelings, or tensions, and if these experiences affect the formation of their attitudes toward their siblings, or their personal/social adjustment, then their attitudes or level of adjustment should differ in some way from those reported by children whose siblings do not present such handicaps. Questions to be considered in this study include: Do children with handicapped brothers or sisters report more negative attitudes toward their siblings than children with nonhandicapped brothers or sisters? Do children with handicapped brothers or sisters report more difficulties in the area of personal/social adjustment than children with nonhandicapped brothers or sisters?

### Purpose of the Study

The purpose of this study is to examine the attitudes that children express toward their siblings, and the level of personal/social adjustment which they report. Of particular interest is a comparison of sibling attitudes and level of personal/social adjustment expressed by children with handicapped brothers or sisters with those of children with nonhandicapped siblings. Specifically this study addresses two issues: (1) the impact of a handicapped child's gender, family position, and severity of handicap on the attitudes expressed by her/his siblings, and (2) the impact of a handicapped child's gender, family position, and severity of handicap on the personal/social adjustment expressed by her/his siblings.

### Research Hypotheses

(1)  $H_0$ — There is no difference between the attitudes reported by siblings of handicapped children and those reported by siblings of nonhandicapped children.

$H_1$ — Siblings of handicapped children report poorer sibling attitudes than do siblings of nonhandicapped children.

(1.1)  $H_0$ — There is no difference between the attitudes reported by siblings of severely handicapped children and those reported by siblings of mildly handicapped children.

$H_1$ — Siblings of severely handicapped children report poorer sibling attitudes than do siblings of mildly handicapped children.

(1.2)  $H_0$ — There is no difference between the attitudes reported by same-sex siblings of handicapped children and those reported by cross-sex siblings.

$H_1$ -- Same-sex siblings of handicapped children report poorer sibling attitudes than do cross-sex siblings.

(1.3)  $H_0$ -- There is no difference between the attitudes reported by older siblings of handicapped children and those reported by younger siblings.

$H_1$ -- Younger siblings of handicapped children report poorer sibling attitudes than do older siblings.

(2)  $H_0$ -- There is no difference between the level of personal/social adjustment reported by siblings of handicapped children and that reported by siblings of nonhandicapped children.

$H_1$ -- Siblings of handicapped children report a lower level of personal/social adjustment than do siblings of nonhandicapped children.

(2.1)  $H_0$ -- There is no difference between the level of personal/social adjustment reported by siblings of severely handicapped children and that reported by siblings of mildly handicapped children.

$H_1$ -- Siblings of severely handicapped children report lower levels of personal/social adjustment than do siblings of mildly handicapped children.

(2.2)  $H_0$ -- There is no difference between the level of personal/social adjustment reported by same-sex siblings of handicapped children and that reported by cross-sex siblings.

$H_1$ -- Same-sex siblings of handicapped children report lower levels of personal/social adjustment than do cross-sex siblings.

(2.3)  $H_0$ -- There is no difference between the level of personal/social adjustment reported by older siblings of handicapped children and that reported by younger siblings.

$H_1$ -- Younger siblings of handicapped children report lower levels of personal/social adjustment than do older siblings.

### Operational Definitions

For the purpose of this study, an attitude is defined as follows: (1) . . . a learned implicit process which is potentially bipolar, varies in intensity, and mediates evaluative behavior (Osgood, Suci, & Tannenbaum, 1971, p. 190); (2) . . . a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object (Fishbein & Ajzen, 1975, p. 10). In addition, attitudes are considered to be multidimensional in nature, consisting of affective, cognitive, and behavioral components (Horne, 1980). Since they cannot be measured directly, they must be inferred from verbal and nonverbal behavior (Anastasi, 1976). In this study, they are inferred from the subject responses to the Sibling Attitude Scale.

Role tension is defined by the behavioral correlates which Farber identified in the 1959 study which presented the construct: (1) quickness to anger; (2) stubbornness; (3) bossiness; (4) moodiness; (5) tendency to become overly excited; (6) jealousy; (7) irritability; (8) sensitivity to criticism; (9) self-centeredness; and (10) depression. The Role Tension Behavioral Rating Scale is used in this study to elicit responses tapping these ten personal/social correlates.

### Limitations of the Study

The goal of this study is not to isolate areas of conflict or concern which are unique to children with handicapped siblings. It is, rather, an attempt to establish a more empirical baseline against which to evaluate future studies of



more specific aspects of the sibling relationship which may be problematic for children with handicapped brothers or sisters. Although an attempt has been made to control for as many variables as possible through its experimental design, it should be recognized that this study leaves a number of variables open to influence the measures taken in a largely undetermined manner. This is a consequence of the complexity of the subject under investigation, and the conclusions drawn take these concerns under consideration.

#### Implications of the Study

From a theoretical perspective, the results of this study provide empirical data against which to evaluate the impact of a handicapped sibling on the attitudes and personal/social adjustment of the other children in the family. Such an evaluation has clear implications for the generation of appropriate assessment and intervention strategies for use with family systems containing a handicapped child.

In terms of its practical value, the study serves to provide a baseline of "typical" sibling attitudes and levels of adjustment against which to compare those of individual children. Brothers or sisters of handicapped children who deviate significantly from this baseline can be identified as at-risk for potential problems.

## CHAPTER II

### Review of the Literature

To establish a framework for evaluating the discrepant findings of previous research concerning children with handicapped siblings, a comprehensive literature review is presented. The first half of this review emphasizes the issues and concerns noted in the establishment of sibling relationships in general, while the second half focuses more specifically on clinical observations and empirical studies of siblings of handicapped children. Aspects highlighted include: the impact of siblings on personality development; stresses in the sibling relationship; the assignment of family roles; and the influence of siblings on peer relationships outside the home. In addition, previous studies related to sibling attitude development are reviewed, and some of their methodological shortcomings discussed.

The impact that siblings have upon one another during the early years is not clearly understood (Dunn & Kendrick, 1979; Murphy, 1979; Pfouts, 1976). This seems largely a consequence of three major trends in the literature:

- (1) Psychoanalytic and developmental theory have given the parent-child relationship primary importance, and have viewed the sibling relationship as a mere reflection of parental attitudes (Einstein & Moss, 1967; Pfouts, 1976).
- (2) Family systems theory, although cognizant of the importance of the sibling subsystem, has focused the bulk of its attention on the husband-

wife and parent-child subsystems in evaluating the efficacy with which a family functions (Hamlin & Timberlake, 1981; Pfouts, 1976).

- (3) Researchers have rarely attempted to study sibling influences directly due to the complex nature of the experimental designs which are necessary in order to control for all of the potentially influential variables (Pfouts, 1976).

In spite of the difficulties inherent in the examination and explanation of the sibling subsystem, there has been some general acknowledgement that it does serve to exert some influence on the establishment of attitudes, preferences, and behaviors which endure even into adulthood (Dunn & Kendrick, 1979; Einstein & Moss, 1967; Ihinger, 1975; Murphy, 1979; Pfouts, 1976). Siblings not only represent partners in one of the child's first social relationships, but also exert an influence upon her/his personality development (Adler, 1939; Koch, 1956, 1960; Toman, 1961), role assignment within the family (Ackerman, 1958; Bell, 1975; Satir, 1967), and approach to and satisfaction with peer relationships outside the family (Koch, 1957).

#### The Impact of Siblings on the Child's Personality Development

Children's experiences with siblings serve as one of the bases for their personality development (Bank & Kahn, 1982; Goodenough & Leahy, 1927; Pfouts, 1976). Pfouts (1976) discussed the nature of sibling influences on the child's developing personality in terms of Social Comparison Theory, which postulates that each individual defines a personal identity through a series of comparisons with relevant significant others (Festinger, 1954). Each child in the family pays close attention to those characteristics in siblings that the parents most approve and disapprove of, and utilizes that information as a framework for determining

the pattern of his/her own personality through an interplay of identification and differentiation processes (Bank & Kahn, 1982).

Identification. Identification refers to a process which leads an individual to feel, think, and act as if the characteristics of a significant other belonged to him or her (Mussen, Conger, & Kagan, 1963). It may be best considered as a continuum of processes lying along a dimension of perceived similarity to perceived difference (Bank & Kahn, 1982; Kohut, 1971):

- (1) **twinning:** a fused relationship (neither individual develops a unique identity).
- (2) **merging:** a blurred relationship (neither individual develops an identity separate from that of the other).
- (3) **idealizing:** a relationship in which one member seeks to emulate the other.
- (4) **loyal acceptance:** a relationship in which each member has a separate identity, but maintains an absolute acceptance of and respect for the other.
- (5) **constructive dialectic:** a relationship in which both members strive for individual uniqueness, and a dynamic balance between dependency and indifference.
- (6) **polarized rejection:** a relationship in which each member appraises the other in a totally negative manner.
- (7) **deidentification:** a relationship in which both members completely deny that any relationship exists.

A healthy sibling relationship lies somewhere in the middle of this identification continuum, and may be described as a "partial identification" (Bank & Kahn, 1982, p. 93) with a significant other. Partial identification is

dynamic in nature (implying an openness to change), and allows each member of the relationship to emphasize both similarities and differences in making a personal comparison with the other.

Differentiation and Family Position. Co-existing with the identification processes is the child's need to differentiate from significant others and forge a unique personality (Ansbacher & Ansbacher, 1959; Kelly, Donald, & Main, 1979). Bank and Kahn (1982) viewed this striving for individuality as the best explanation for the birth order attributes described by Adler (1939), Koch (1956, 1960), and Toman (1961), among others.

Adler proposed a theory of personality emphasizing the impact of birth order on the developing individual (Adler, 1939; Ansbacher & Ansbacher, 1959; Dreikurs & Grey, 1968). His major premise was that children develop different traits in order to secure an important position and area of superiority within the family. From this perspective, Adler identified certain personality characteristics which he believed emerged in response to the child's place within the family constellation.

First children are described as conservative and compliant in nature, constantly striving to be "super-kids" in order to regain the position of control and dominance which was lost when they were "dethroned" by the birth of their younger sibling(s). These traits seem a likely response to a close identification with the parents. Second-born children are seen as polar opposites of their older siblings, somewhat rebellious, and always attempting to capitalize on perceived areas of weakness in their brothers or sisters in order to establish their own areas of dominance which cannot be challenged. They have not only parental, but also peer models against which to evaluate themselves, and with which to identify. Youngest children often are presented as pampered and dependent, and

sometimes magnetically charming. It is often suggested that this special charm emerges as an attempt to insure the ongoing presence of the multitude of loyal caretakers which characterized their early lives. This kind of passive, dependent family role may be the only one left to claim if the child is to avoid competing directly with other, more powerful family members.

Research regarding the impact of birth order on personality has been substantial, particularly related to the attributes of first-born children. Cushna, Greene, and Snider (1964) found first-borns to display twice as many behavior disorders as youngest children, to be more aggressive, and to demonstrate more symptoms of anxiety. In an extensive study of sibling attitudes, Koch (1956, 1960) found first children to be more jealous, more adult-oriented, more stressed, and under more super-ego control than second children. Other studies have described first-borns as more easily influenced, with less self-confidence and lower self-esteem (Goodenough & Leahy, 1927; Ring, Lipinski, & Braginsky, 1965; Zimbardo & Formico, 1963); more anxious and more affiliative (Schachter, 1963); more independent (Stagner & Katzoff, 1936); higher in achievement motivation (Sampson, 1962); lower in empathy (Stotland & Dunn, 1963); and more highly susceptible to mental illness and juvenile delinquency (Goodenough & Leahy, 1927; Sietto, 1934) than were their later-born siblings. These traits may indeed emerge in response to being "dethroned" by a younger child (Adler, 1939). It could also be suggested, however, that they are consistent with an over-identification with parental models during their early years when peer models were unavailable as points of reference.

It should be noted that several factors have been cited as mediators of birth order position on personality development: age (Croake & Hayden, 1975); gender (Goodenough & Leahy, 1927; Koch, 1956, 1960); age interval between

siblings (Croake & Hayden, 1975; Koch, 1956, 1960); and the presence of a handicapped or chronically ill sibling (Adler, 1939; Ansbacher & Ansbacher, 1959). Clearly such factors should be taken into account when assessing the development of any individual's personality, and in fact speak against an over-interpretation of the birth order variable under any circumstances.

The difficulties in evaluating the relative impact of any of the factors listed above have led many researchers to suggest that the influence of the family position of the child is virtually uninterpretable (Croake & Hayden, 1975; Stagner & Katzoff, 1936). Koch (1956), however, proposed that the ordinal position variable was an important one in terms of understanding personality development, particularly in situations where siblings were of a wide age interval and opposite in sex. Such a situation serves to modify the influence of sibling identification by intensifying the striving for differentiation from a model who clearly cannot be matched on her/his own terms.

#### The Development of the Sibling Relationship

Whatever the influence that the presence of a sibling may have on the personality development of each child as an individual, it seems that the interaction between them represents the most significant factor in developing the attitudes that they have toward one another (Bank & Kahn, 1982; Murphy, 1979). Lavine (1977) discussed the nature of these interactions from a developmental perspective, describing each member as increasingly influencing, and being influenced by, the other. Five consecutive stages defined her view of this relationship as it evolves: (1) attending to the sibling; (2) responding to the sibling; (3) forming a triadic relationship with the sibling and mother; (4) interacting with the sibling without a mediator; and (5) developing sibling role behavior.

As the sibling relationship evolves, each child may assume a myriad of roles in response to the other (confidant, buffer, teacher, critic). The complementarity of these roles at any point in time influences the affective quality that each member attributes to their interactions (Einstein & Moss, 1967).

Emotional Ambivalence and the Sibling Relationship.

... because along with rivalry and downright hate among siblings, there exists also the securing sense that those who are bound by blood and battle have close quick bonds, communication that is visceral as well as verbal, and sometimes, downright love for one another (Perlman, 1967, p. 48).

From an affective point of view, the sibling relationship seems best characterized as stressful, somewhat volatile, and complicated by the presence of many ambivalent emotions (Pfouts, 1976). Exchanges between brothers and sisters are often heavily laden with strong feelings, warm and affectionate or filled with animosity (Dunn & Kendrick, 1979). Einstein and Moss (1967) discussed several areas of sibling interaction which seem to contribute to the formation of their attitudes toward one another, among which were: (1) the quality and intensity of affect in their interactions; (2) the striving to be similar to or different from each other; (3) feelings of superiority or inferiority; (4) feelings of dependency; (5) feelings of support or devaluation; (6) sibling rivalry; (7) the level of perceived mutuality in terms of sharing; and (8) the formation of alliances with or against each other. They described the feelings and attributions in each of these areas as highly dynamic in nature, constantly shifting in such rapid succession that contradictory perspectives may seem to exist simultaneously, and creating an emotional ambivalence that may be hard to tolerate within the intimacy of family life.



The intensity of the feeling tone of any sibling relationship seems largely determined by their level of access to one another (Bank & Kahn, 1982). Obviously such access is greatest for children who are close in age and of the same sex. The quality of the feeling tone between siblings may range from affection, intimacy, and caring to aggression, hostility, and anger (Einstein & Moss, 1967). Parental attitudes and behaviors have a tremendous impact upon both the intensity and the quality of sibling interactions, and therefore upon the feelings that the children develop toward one another (Bank & Kahn, 1982; Ihinger, 1975; Pfouts, 1976). Whatever the feeling tone established between siblings, it seems likely that it serves to directly influence the other areas of interaction described by Einstein and Moss (1967).

Jealousy and Sibling Rivalry. Perhaps the most researched area of sibling interaction is that of rivalry between brothers and sisters (Adler, 1939; Ihinger, 1975; Obendorf, 1929; Ross, 1931; Sewall, 1931). Many of these studies of sibling conflict emerged in response to the psychoanalytic position that all children in a family participate in a competition for parental love and approval (Adler, 1939; Kelly, Donald, & Main, 1979; Levy, 1937; Sayles, 1928). In addition to their being motivated to compete with one another for parental favors, however, Koch (1956, 1960) found that children also experienced rivalrous feelings with regard to skills and abilities, and Ihinger (1975) commented on competition between siblings for privileges and possessions.

Smart and Smart (1953) differentiated between sibling rivalry and jealousy in the following manner: (1) rivalry occurs when "the need to feel worthy is frustrated" (p. 163); (2) jealousy occurs when "the need to love and be loved is frustrated" (p. 149). Given this distinction, it seems plausible that rather than being the hallmark of sibling rivalry, jealousy over parental love may merely be

one factor among many which may contribute to its emergence (Abramovitch, Corter, & Lando, 1979; Pfouts, 1976).

Sibling jealousy has been defined by a variety of behavioral correlates (Ross, 1931; Sewall, 1931): physical aggression against the sibling; ignoring or denying the presence of the sibling; temper tantrums, negativism, and/or destructiveness; timidity, shyness, and/or excessive daydreaming; regression to behaviors more characteristic of an earlier developmental stage.

A number of researchers have attempted to isolate the variables which seem to contribute to the emergence of the more disruptive cases of jealousy between siblings. Sayles (1928) summarized the psychoanalytic view as follows:

Jealousy and antagonism between children may originate in the early displacement of one child by the coming of another, or in the conviction of one child that another, older or younger, is preferred. Such a feeling may be tremendously intensified by a consciousness of inferiority to the preferred child (p. 30).

Flugel (1926) believed that the younger child experiences jealousy in response to the privileges held by the older sibling, while the older child experiences the same feeling in response to his/her view of the younger sibling as an intruder upon previously held territory. Other studies have indicated that whatever the point of focus, girls (Foster, 1927; Ross, 1931; Sewall, 1931; Smalley, 1930), younger children (Ross, 1931), brighter children (Ross, 1931; Sewall, 1931), first-born children (Rosenow, 1930; Ross, 1931; Sewall, 1931), and children from smaller families (Ross, 1931; Sewall, 1931) displayed more symptoms of jealousy in their interactions with siblings. Sewall (1931) and Koch (1956, 1960) found the age interval of 18 to 42 months particularly stressful, and associated with more jealousy. Siblings of a greater age interval appeared to be less jealous of one

another, and less competitive in general in their interactions. Dunn and Kendrick (1979) found more conflict and more jealousy between same-sex siblings, while (Koch, 1956, 1960) determined that cross-sex pairs were more jealous of each other (particularly older girls with younger brothers), in part due to conflicts around sex-role identity issues.

It has also been determined that parental attitudes and behaviors have tremendous impact on the amount of jealousy experienced by siblings. Familial factors which seem to intensify the conflict between brothers and sisters include: parent over-solicitude (Sewall, 1931); inconsistent discipline (Sewall, 1931); inconsistent inequity in dealing with children (Ihinger, 1975); and consistent overvaluation or devaluation of a particular child (Bank & Kahn, 1982; Ross, 1931; Thom, 1927).

Recently there has been an effort to explain sibling rivalry and jealousy from a non-psychoanalytic framework, focusing instead upon cognitive structures and observed behaviors (Bandura, Ross, & Ross, 1961; Ihinger, 1975). Using social learning and exchange theories as a framework, Ihinger (1975) described six basic "goal-objects" which the young child desires and the parents control: love, attention, approval, parental time, space, and physical objects. He suggested that the children in the family compete for a maximum share of all of these rewards. This competition becomes intensified into conflict only when there is no shared understanding of the rules for dispensing the desired goal-objects. As long as there is a consistent and explicit basis for parental decisions regarding dispensation, distribution may be perceived as equitable (even if from an objective point of view it is not), and a cohesive, non-jealous sibling relationship will emerge.

While traditional perspectives on jealousy seem to focus on sibling competition for love and approval, brothers and sisters also seem to compete for material possessions, and for the achievement of special skills which bring notoriety to the champion (Einstein & Moss, 1967). Pfouts (1976) found that siblings who fail to compete effectively with the other children in the family on important personality variables (such as intelligence or school achievement) may experience tremendous hostility and jealousy toward the child surpassing him or her. Koch (1956) found that children reported much competition in other skill areas (such as the performance of stunts and tricks). It seems interesting, however, that such competition was restricted to those areas where both children had the necessary prerequisite skills and abilities to compete effectively (implying a "fair" basis for comparison).

In terms of this skill-based rivalrous/competitive behavior between siblings, Koch (1956, 1960) found less competition where there was a wide interval between the children's ages. This seemed due to the fact that when interests overlapped less, the older child "could afford to be more protective of and less competitive with the younger" (Koch, 1956, p. 25).

While some jealousy and competition between brothers and sisters seems unavoidable, ongoing and intense sibling conflict has a highly detrimental effect on both the sibling relationship, and the family as a unit. It may serve to heighten the emotional ambivalence and its attendant anxiety that seem central to sibling interactions (Einstein & Moss, 1967), and to discourage sibling identification (Bank & Kahn, 1982; Ihinger, 1975). In addition, it may serve to disrupt the overall functioning of the family, and to adversely affect the degree of member satisfaction expressed by both parents and children (Hamlin & Timberlake, 1981).

Sibling Dependency. Bank and Kahn (1982) discussed some sibling relationships which seemed characterized not by rivalry, but rather by extreme dependency and/or attachment on the part of one (or both) of the children. In many cases, such interactions resulted from home situations where the parents were physically or emotionally unavailable to their children, leaving the burden of responsibility for nurturance to one or more of the brothers and sisters (Einstein & Moss, 1967). There are clearly numerous problems inherent in a situation where one child must attempt to meet the needs of another without the prerequisite power, strength, and maturity to do so, and these relationships tend to be viewed as unsatisfactory by both members. The disappointments and frustrations necessarily experienced by each child may intensify the prevailing level of emotional ambivalence, and elicit anxious, aggressive, or hostile attitudes (Bank & Kahn, 1982) which further complicate sibling adjustment.

Additional Stressors in Sibling Interactions. Koch (1956, 1960) identified three additional aspects of the sibling relationship which may be experienced as emotionally difficult by the children involved:

- (1) sibling bossiness (particularly noted by boys with older sisters).
- (2) failure of a sibling to respect the property of a brother or sister.
- (3) assignment of caretaking duties with regard to a younger sibling (particularly noted by girls with brothers two-to-four years their junior).

When operative, these issues seemed to have a negative impact on the attitudes that the brothers and sisters expressed regarding one another.

### The Family and Sibling Relationships

The relationships established between pairs of siblings have tremendous impact on the attitudes that the children develop toward one another, but "the

way in which they affect one another's development is always subordinate to the total patterns of influences prevailing in the family" (White, 1976, p. 88). Since siblings seldom interact in total isolation, it seems necessary to consider the influence that the family unit exerts upon their patterns of interaction and overall adjustment.

One function of the family is to define complementary roles for each member (Einstein & Moss, 1967). Such roles, and the expectations which they create, serve to define what constitutes acceptable behavior within a given context. At least three major factors influence the family roles assigned to a child: gender (Koch, 1956, 1960; Maccoby & Jacklin, 1974; Tudiver, 1980); temperament (Bank & Kahn, 1982); and age (Koch, 1956, 1960). These family roles set clear limits on the behavioral options available to siblings as they negotiate their relationship, and negative sanctions are usually imposed when role expectations are not met.

The influence of sex-role stereotyping on a child's patterns of interaction with others has been well-documented (Lewis, 1972; Maccoby & Jacklin, 1974; Zalk & Katz, 1978). Traditional sex-role expectations seem to dictate that girls be affectionate, demonstrative, and socially-oriented (Abramovitch, Corter, & Lando, 1979; Tudiver, 1980); accepting and expressive (Johnson, 1963); compliant and dependent (Lewis, 1972; Zalk & Katz, 1978). Boys, on the other hand, are expected to be competitive, achievement-oriented, and in control of their feelings (Tudiver, 1980); instrumentally-oriented (Johnson, 1963); less compliant and more independent (Lewis, 1972; Zalk & Katz, 1978). If these values are held in common by family members the child experiences tremendous pressures to behave in a manner consistent with them, and exerts pressure upon her/his siblings to do the same.

Parental perceptions of the temperament of each child may also serve to constrict the behavioral options available for negotiating sibling relationships (Bank & Kahn, 1982). Such seemingly irrelevant infant characteristics as activity level, size, sensitivity to the environment, and amount of crying contribute to family attitudes regarding the child's relative intelligence, strength, and vulnerability. This seems to come about through member comparisons of the child with siblings, or some "ideal child" conceptualized by the parents. These early impressions may persist throughout the child's life in the family, often in the face of evidence demonstrating their inaccuracy (Bank & Kahn, 1982; Bates, 1980; Campbell, 1977; Escalona & Heider, 1959; Thomas, Chess, & Birch, 1968), and dictate family expectations regarding both personality and behavior.

The child's age and level of maturity seem to influence the role expectations held by his/her parents and siblings. (Koch 1956, 1960) found that latency-aged siblings were expected to assume more responsibility than the younger children in the family, and to satisfy themselves with privileges that were age-graded in nature. Infants, toddlers, and even preschoolers were allowed more dependency, and were more frequently indulged by everyone.

When maintained in an inflexible manner, such role expectations constrict the child's behavior within the family, but they also provide a framework for conducting family relationships that can be somewhat comforting. Roles and role expectations change somewhat, however, so that the family can develop as a dynamic system. As these changes occur, the relationships established between siblings must be re-negotiated, creating new confusion and some ambivalence regarding their interactions (Bank & Kahn, 1982; Einstein & Moss, 1967).

### Sibling Influences on Peer Relationships

Ultimately, children must move out from the family and into a broader social context. Through interactions with their siblings, they acquire their first experiences with a peer group (Abramovitch, Corter, & Lando, 1979). Clearly, these experiences influence the skill and ease with which they negotiate their relationships with other children.

In interactions with siblings, the child learns culture-specific social skills such as an acceptance of the rights of others, and personal responsibility (Einstein & Moss, 1967). There is also substantial evidence that siblings influence the acquisition of such prosocial behaviors as imitation, turn-taking, empathy, and co-action (Abramovitch, Corter, & Lando, 1979; Dunn & Kendrick, 1979). From their involvement with their brothers and sisters, younger children learn basic role-taking skills, while older children learn to demonstrate qualities of social understanding such as cooperation, and the communication of caring and affection (Dunn & Kendrick, 1979). Perhaps most importantly, there is some evidence that the attitudes that a child takes with regard to the value of social relationships may be a function of her/his involvement in and satisfaction with the sibling relationship (Koch, 1956). Such attitudes probably have some positive correlation with the development of overall sociability in the child.

In a study of the relationship between certain social attitudes and specific characteristics of a child's sibling(s), Koch (1956) found that:

- (1) First-born children tended to be more sociable, particularly if they had opposite-sex siblings and the birth interval between them was wide. Second-born males with older sisters tended to have the greatest difficulty with social relationships.



- (2) Leadership was positively correlated with age disparity between a child and the next-older sibling, probably because of the child's increased level of responsibility in such situations.
- (3) The presence of opposite sex siblings seemed to stimulate social development, perhaps because of the competition and variety of experiences such a family situation generates.

### Sibling Attitudes

Any of the factors discussed thus far may be involved in determining the general attitudes that a child may take with regard to his/her brothers and sisters. The limited research in this area has provided some broad findings based on the impact of birth order, gender, and age interval.

Birth Order. Koch (1960) found that first-born children expressed negative attitudes toward their siblings more frequently than did later-born children. They seemed to find the sharing of parental time difficult to adjust to, and gained little compensation from the company provided them by the other children in the family. Later-born children seemed to appreciate the companionship and access to possessions that their older brothers and sisters provided for them, and found this reasonable compensation for being "bossed" by their more powerful peers.

Gender. Same-sex siblings seemed to experience more positive feelings toward one another than did cross-sex siblings (Koch, 1960). They seemed to express more interest in interacting with one another, and claimed more frequent contact. Sisters were noted to be more frequent play companions than were brothers, perhaps due to the sex-role orientation of females which encourages them to be more socially responsive and less rejecting of others.

Age Interval. The data regarding the impact of age interval on sibling attitudes seem mixed. White (1975) and Cicirilli (1973) found that greater age spacing between children produced more prosocial behavior and less stress during interactions. In contrast, Koch (1960) found that children born at close spacings interacted more, had more interests in common, preferred playing together more, and expressed more positive attitudes toward one another than did children at distant spacings. In their more recent research, Abramovitch, Corter, and Lando (1979) found that age interval made no appreciable difference in the development of sibling attitudes.

#### Influence of a Handicapped Sibling on the Developing Child

In an extension of the research on sibling relationships, recent attention has been focused on sibling subsystems containing a handicapped child (Gath, 1973, 1974; Lavine, 1977; Samuels & Chase, 1979; Schwirian, 1976; Shugart, 1958). In defining such family units, three key aspects seem important (Bank & Kahn, 1982):

- (1) One sibling has difficulties which command unusual amounts of attention from family members.
- (2) These difficulties are accorded more importance and are seen as more serious than any concerns presented by other family members.
- (3) The child in question requires extraordinary medical, educational, or other support services in order to function in the home and community.

Although research results are not in complete agreement (Richardson & McIntosh, 1973; Schwirian, 1976; Simeonsson & McHale, 1981), there is evidence in the literature that the presence of a handicapped child in the family has a definite, and often disruptive influence on the development of the other children

(Hamlin & Timberlake, 1981; Meissner, 1970). Children with handicapped siblings are first of all siblings, and it seems reasonable to assume that all of the previously cited literature applies in terms of their developing relationship. It has been noted, however, that brothers and sisters of the handicapped display more emotional and behavioral problems (Davis, 1975; Lonsdale, 1978; Poznanski, 1973; Tew & Laurence, 1973); less satisfactory adjustment to, and interactions with, their siblings (Farber, 1959, 1960; Lonsdale, 1978; Maki, 1977; Shugart, 1958); more role tension within the family system (Farber, 1959, 1960; Lavine, 1977; Simeonsson & McHale, 1981); and poorer social interactions with peers (Lonsdale, 1978; Russell, 1980) than do children with nonhandicapped siblings. The following body of literature reflects some of the additional issues which may influence sibling adjustment and attitude development in families of handicapped children.

#### Personality Development in Children with a Handicapped Sibling

Although the impact of having a handicapped brother or sister seems to be mediated by a number of variables, such as each child's gender and birth order, the severity of the handicapping condition, and the general level of family adjustment (Simeonsson & McHale, 1981), research has suggested that the nonhandicapped sibling experiences some special problems with regard to personality development as a result of her/his unique family situation (Bank & Kahn, 1982; Grossman, 1972; Russell, 1980).

Identification. Grossman (1972) found that one of the main tasks confronting siblings of handicapped children is to avoid identifying too completely with their brothers or sisters. Many of these children are haunted by concerns around their own physical, mental, and emotional health, and at some point entertain the question "Is something wrong with me, too?" (Kaplan, 1969;

Russell, 1980). Efforts to deal with this issue often lead them to adopt extreme strategies to try to differentiate from the handicapped family member, perhaps in a desperate attempt to insure their own healthy status. Their identity development in relationship to the handicapped child may become characterized by polarized rejection, deidentification, or projective identification, rather than by one of the more healthy and dynamic processes (Bank & Kahn, 1982).

In a sibling relationship based on polarized rejection, the non-handicapped child comes to express overt dislike for the handicapped brother or sister. He or she may, however, experience considerable discomfort with the employment of this coping strategy due to the ever-present fear that the rejected aspects of the handicapped sibling also exist in his/her own personality. Life becomes an endless struggle to avoid the fear by forging a personality totally opposite to that of the handicapped child.

Through deidentification, the nonhandicapped sibling may create distance between him-/herself and the handicapped child by completely denying that they have anything in common from which to form a relationship. The child may fight against having any contact with this sibling at all, rejecting the handicapped family member outright. Ultimately a total disassociation may be accomplished which effectively eliminates the handicapped child as an object of identification.

Projective identification represents a defensive reaction whereby the nonhandicapped child projects his or her own unacceptable personality traits (such as dislike for or resentment of the handicapped child) onto the handicapped brother or sister. Through this process, the child may disown the disliked or forbidden parts of his/her own personality, while alleviating any guilt associated with negative feelings held toward the handicapped sibling. The relationship established between the children becomes one characterized by scapegoating.

The resolution of the identification/differentiation conflict may be focused at the other end of the identification continuum, with the nonhandicapped child coming to over-identify (via twinning or mirroring) with the handicapped brother or sister. The child may elect to exhibit his/her own symptomology, forming a kind of special bond with the handicapped sibling (Arnold, 1975; Hamlin & Timberlake, 1981; Laviguer, 1973; Meissner, 1970). Although not seen frequently, the exercise of this particular solution presents the entire family system with a multitude of problems.

Changes in the Family Constellation. Adler (1939) noted that the presence of a handicapped child may alter the configuration of the family constellation. Frequently this sibling is never completely integrated into the family unit (Lavine, 1977), and ultimately takes the position usually reserved for the youngest child (Ansbacher & Ansbacher, 1959; Farber, 1959, 1960; O'Connor & Stachowiak, 1971). In response to this shift in expected roles, a chronologically younger child must move up to assume the vacated position in the family. Such an alteration in the family constellation has been frequently associated with lower levels of personal adjustment for the younger child who must move up (Bossard & Bell, 1956; Goodenough & Leahy, 1927). As an assigned "older" child, he/she must meet additional responsibilities, such as the mediation of conflicting demands made by parents and siblings, and must deal with these responsibilities without the power usually granted to a child with first-born status (Farber, 1959). Attempts to meet personal needs or wishes are often frustrated due to competing demands (Farber, 1959). Research evidence for this alteration in expectations relative to actual birth order of the nonhandicapped child was cited by Shere (1954), who noted that in studies of cerebral palsied/non-cerebral palsied twin pairs, the nonhandicapped child was described as more stubborn,

more easily excited, more resistant to authority, more jealous, and less cheerful than the handicapped twin. It should be noted that these characteristics correlate well with those noted in first-born children by Koch (1956, 1960).

Personality Attributes of Siblings of Handicapped Children. Research has suggested that the presence of a handicapped child in the nuclear family may be correlated with certain personal attributes in her/his nonhandicapped sibling(s). In a study of brothers and sisters of spina bifida survivors, Tew and Laurence (1973) found four times the incidence of psychological adjustment problems as were noted in a control group of children with nonhandicapped siblings. McAndrew (1976) found that 25% of the parents in a study of the families of handicapped children reported that at least one of their other children manifested undesirable behavioral traits, such as head-banging, enuresis, encopresis, or school refusal. In a study of children with brothers or sisters diagnosed as having Down's Syndrome, Gath (1973) noted that restlessness, disobedience, depression, and temper tantrums were commonly reported by their parents as behavioral symptoms of concern.

From a more positive perspective, Schipper (1959) found that three-quarters of the siblings of Down's Syndrome children were reported by their mothers to be happy and well-adjusted. Other studies described children with handicapped brothers or sisters as more mature, more responsible, more tolerant of others, and more empathic than were their peers (Grossman, 1972; Schreiber & Feeley, 1965). Grossman (1972), in interviews with college-aged siblings of handicapped children, found that 45% of them felt that they had benefitted personally from the experiences that they had in their families, and that they had positively affected the life-goals that they had set for themselves.

### Impact of a Handicapped Child on the Sibling Relationship

The age, gender, and birth order of each of the children in the family are variables which influence the nature and frequency of the interactions between the handicapped child and her/his sibling(s) (Farber, 1960). The affective quality of these interactions seems to depend, at least in part, on the effectiveness with which the nonhandicapped brother or sister resolves the identification conflict experienced in response to the handicapped child (Bank & Kahn, 1982). Establishing some basis for at least partial identification with this sibling seems to moderate some of the ambivalent feelings elicited by the special problems faced in negotiating their relationship, thereby facilitating a better adjustment and more positive feelings.

Emotional Ambivalence. The feelings elicited in the nonhandicapped child in response to his/her handicapped brother or sister seem to range from love and devotion, to guilt, envy, and resentment (Maki, 1977; Shugart, 1958). Several factors seem to be operative in these special families which exacerbate the typical ambivalence seen in relationships between brothers and sisters (Shugart, 1958):

- (1) The nonhandicapped child is frequently confined to a peripheral position with regard to parental time and emotional investment.
- (2) Due to inequitable expectations regarding acceptable behavior, the nonhandicapped child may be forced to tolerate abuse and/or deprivation either directly or indirectly at the hands of the handicapped sibling.
- (3) Despite efforts to establish a relationship with the handicapped child, the sibling may experience frustration due to the social ineptness of her/his sister or brother.

- (4) The nonhandicapped child may often be in the difficult position of having to defend his/her sibling against other children, sometimes damaging personal peer relationships in the process.

Most siblings of handicapped children have some positive feelings for their brother or sister (Grossman, 1972; Shugart, 1958). No matter what difficulties the sibling may present, he or she is bound to the child by blood, by shared experiences, and by the time that they spend together. The nonhandicapped child is bound, too, by the fact that this sibling is a very important person to the parents shared by both of them.

Guilt. Samuels and Chase (1979) defined guilt as the predominant emotion felt by children with emotionally disturbed siblings. Younger siblings seemed to experience guilt with regard to their own mental and physical health, while older siblings attributed their guilt to earlier sibling rivalry (Abrams & Kaslow, 1976). Russell (1980) found that 45% of the siblings of mentally retarded children reported guilt relative to the handicapped brother or sister. These guilt feelings were sometimes translated into hostility toward the sibling through projective identification. In other siblings, they formed the basis for a lifetime commitment to insure adequate care and protection for the handicapped child as a means of retribution (Poznanski, 1973). Guilt seems to present a particularly difficult problem for children when the sibling must be hospitalized or institutionalized (Hamlin & Timberlake, 1981; Russell, 1980; Shugart, 1958). For them, the removal of the child may be seen as a consequence of their feelings of indignation and fury, and the ensuing guilt may inhibit any healthy discussion of the decision for placement which could serve to clarify the situation.

Jealousy and Sibling Rivalry. If jealousy and sibling rivalry are influential factors in any relationship between siblings, it would seem that the impact of a



handicapped child on the family would exacerbate the problems that they present. Sibling rivalry involving a handicapped child often becomes intensified by parental tendencies to become preoccupied with or overprotect the less self-reliant child (Holt, 1958; Lonsdale, 1978; Sewall, 1931). Parental inequities regarding attention, discipline, and expectations may also provide fuel for the sibling conflict (Murphy, 1979; Perkins, 1978; Sewall, 1931), and to complicate the adjustment of the nonhandicapped children (Farber, 1959). In addition, it has been noted that in an effort to protect the feelings of the handicapped sibling, parents may be cautious about praising their other children for their accomplishments (Perkins, 1978). This serves to further deprive them of the attention and approval that they seek.

Confounding the problem are the nonhandicapped child's beliefs that it would be morally wrong to attack his/her less capable adversary, and that negative sanctions would be imposed if open confrontation were attempted (Bank & Kahn, 1982; Koch, 1956; Lonsdale, 1978). This attitude is likely a consequence of the child's modeling parental reluctance to provide unpleasant consequences for misbehavior in disciplining a handicapped child (Poznanski, 1973; Russell, 1980). Whatever its source, it serves to limit the outlets available to the nonhandicapped child for dealing with her/his jealousy and other negative feelings.

Anger. Siblings of handicapped children sometimes report feeling bitter, angry, and deprived (Poznanski, 1973). This seems in part due to certain inequities inherent in their family situations. Given the frustrations that they experience, it might be expected that they would occasionally view their brother or sister with some degree of anger and hostility. It appears likely, however, that their view of their parents is also colored by some of the same feelings due

to disappointments around their perceived failure to meet their responsibilities to the other members of the family. Murphy (1979) noted that many of the nonhandicapped siblings he interviewed felt that they were overworked, and forced to be compensators and caretakers for the handicapped child. These feelings seem more likely attributable to perceptions of parental demands and attitudes than to demands actually placed upon them by their families. Often these negative feelings experienced with regard to the parents are displaced onto the handicapped child (Bell, 1975; Einstein & Moss, 1967). According to Einstein and Moss (1967), this phenomenon occurs for two reasons: (1) there are fewer negative sanctions against hostility directed toward peers than that directed toward adults; and (2) it is safer to direct hostile feelings toward a family member upon whom the child is not directly dependent for survival.

Handicapped Children and Sibling Dependency. A number of researchers have commented upon the tendency of siblings of handicapped children (especially older sisters) to play a surrogate parent role in relationship to their brother or sister (Boszormenyi-Nagi & Spark, 1973; Farber, 1959; Simeonsson & McHale, 1981). As they grow older, there seems to be a strong pull for them to become increasingly protective of and increasingly responsible for initiating activity with the handicapped child. Over time, they grow obviously superordinate to her/him in terms of power, status, and responsibility. As they continue to negotiate their interactions, the handicapped child becomes completely dependent upon them within the structure of their relationship (Farber, 1959). As noted earlier, this seldom produces a satisfying relationship for either member.

### Families of Children with Handicapped Siblings

The presence of a handicapped child has a profound effect upon the structure, functioning, and development of the family system (Simeonsson & McHale, 1981), and upon the assignment of family roles. The comfort with which these roles are assumed seems to contribute a great deal to each child's definition of the sibling relationship, and to his/her attitudes regarding its nature.

Role Tension. Bernard Farber (1959, 1960) discussed the impact of a handicapped child on family integration and member roles as the most significant mediator of sibling adjustment. He proposed that children are more role-oriented than are adults, and are therefore more influenced by this aspect of family life. Due to their orientation, they are more highly sensitive to short-run shifts in family roles than are the adult family members, and are more affected when the presence of the handicapped child inhibits the maintenance of satisfactory interactions among the members of the family system.

Farber noted that parents tend to put pressure on the nonhandicapped sibling to conform to more mature role expectations than might ordinarily be held, largely due to their own needs to escape from the difficulties inherent in rearing a disabled child. They may expect her/him to serve as compensation for their own grief and disappointment, and as an agent for the resolution of their anxieties about their parental abilities, by being a "model" child. These parents may also rely upon their nonhandicapped child to provide them with opportunities to interact with parents facing more typical challenges with regard to child-rearing. These pressures may be experienced by the child as "role tension", which is defined as "a lack of effective role coordination in the mother-father-child triadic relationship with the normal child as the point of reference"

(Farber, 1959, p. 81). Given the fact that the expectations of the parents are frequently unrealistic from an objective point of view, it seems likely that the nonhandicapped child cannot fully conform to them. Parental disapproval and/or perceived failure may lead to anxiety, frustration, and conflict (Farber, 1959, 1960; Simeonsson & McHale, 1981). In addition, the discrepancy between what the parents expect and what the child can actually do may lead to genuine identity confusion and self-doubt (Sears, Maccoby, & Levin, 1957; Zimbardo & Formico, 1963).

Several behavioral manifestations of role tension in children with a handicapped sibling have been described (Farber, 1959, 1960):

- (1) quickness to anger
- (2) stubbornness
- (3) bossiness
- (4) moodiness
- (5) tendency to become overly excited
- (6) jealousy
- (7) irritability
- (8) sensitivity to criticism
- (9) self-centeredness
- (10) depression

It may be significant that these are the same personal/social traits frequently described in research evaluating the behavioral characteristics of children with handicapped brothers or sisters (Davis, 1975; McAndrew, 1976; Poznanski, 1973; Shere, 1954), and of first-born children (Cushna, Greene, & Snider, 1964; Koch, 1956, 1960; Ring, Lipinski, & Braginsky, 1965). Such traits likely emerge as a consequence of parental expectations that first-born children, and siblings of

handicapped children, demonstrate levels of maturity and responsibility beyond their years.

Role tension for the sibling tends to increase as the handicapped child grows older. This seems a natural consequence of the growing disparity between his/her own status in the family, and that of the handicapped child (Farber, 1959). The role of the nonhandicapped sibling must continually be re-defined with the passage of time, and that need to shift roles likely generates anxiety, frustration, and conflict.

Role Confinement. There seems to be a tendency for parents to overgeneralize regarding a handicapped child's disabilities, often leading them to lower their expectations in inappropriate areas. They may confine that child in an unnecessarily rigid, infantile role that further inhibits the development of more mature behaviors and attitudes (Cushna, Greene, & Snider, 1964; Lavine, 1977).

One consequence of this immature, static role assignment for both the handicapped child and her/his siblings is its tendency to inhibit the development of normal patterns of sibling interaction. The parents may attempt to stage or impose sibling contacts, operating from the assumption that the children are unable to function in a more spontaneous relationship (Lavine, 1977). Obviously, this eliminates most possibilities for negotiating a mutually acceptable pattern of social exchange, robbing the handicapped child of relevant social experiences, and the nonhandicapped child of any sense of personal power and freedom of choice.

Other Role Dynamics. O'Connor and Stachowiak (1971) found that in families with a retarded child in the home, the oldest nonhandicapped sibling had tremendous power in terms of influencing family interactions. This was in

contrast to families without a handicapped member, where the youngest child generally held this controlling influence. The likely source of this power seemed the surrogate parent role attributed to the oldest child (particularly if that child were female), due to the overwhelming nature of the caretaking responsibilities in a system with a highly dependent member (Farber, 1960). While such power may seem highly desirable, it also presents the child with problems and duties which she/he may not be socially and emotionally prepared to manage. It also serves to disrupt the role expectations which are held by each member of the family, and thereby disrupt family functioning.

#### Peer Relations and Siblings of Handicapped Children

Poor peer relationships have been a common complaint of children with handicapped siblings (Gath, 1973; Lonsdale, 1978). Murphy (1979) discussed this problem as resulting from their difficulties in communicating about the disabled family member due to uncertainty about the attitudes held by their friends. They seemed to resolve this conflict by either avoiding contact with peers on the assumption that they would be unsympathetic or cruel, or set themselves up for disappointment by simply assuming that their friends would understand without benefit of explanation. Parents often compound this problem by failing to acknowledge the need for an explanation to offer to other children that could alleviate some of the discomfort of both parties (Barsch, 1961).

When interactions with peers do occur, they can be decidedly negative in nature. Often the children are placed in a position of having to defend their handicapped sibling against physical or verbal abuse by peers. They may also become the victims of such abuse themselves (in a kind of guilt by association), and frequently respond to such situations with feelings of bitterness and shame (Abrams & Kaslow, 1976; Featherstone, 1980).

The problem of peer relationships seems to be exacerbated by the tendency of families of handicapped children to be somewhat socially isolated (Farber, 1960; McAllister, Butler, & Lei, 1973; Poznanski, 1973). This situation serves to limit both the availability of potential peer contacts for the nonhandicapped child, and her/his opportunities to develop and practice the age-graded social skills needed for future social relationships.

#### Sibling Attitudes Regarding Handicapped Brothers and Sisters

The general attitudes that a nonhandicapped child ultimately develops with regard to a handicapped sibling are the result of the manner in which these personal, familial, and social conflicts are resolved. A number of variables seem to be involved (Simeonsson & McHale, 1981):

- (1) characteristics of the nonhandicapped child, such as age, birth order, gender, and birth interval between that child and the handicapped sibling.
- (2) characteristics of the handicapped child, such as the degree and type of handicap, gender, and physical appearance.
- (3) parental attitudes and the level of adjustment of the total family system.
- (4) access of the nonhandicapped child to information and opportunities to develop skills for satisfying interactions with the handicapped child.

With so many potentially interactive variables, the results of research in this area are difficult to interpret. In spite of the problems, however, some general trends have emerged.

Research has indicated that certain characteristics of the nonhandicapped sibling in relationship to the handicapped child may either facilitate or impede the development of positive attitudes regarding their interactions. Many studies

have indicated that siblings who are older than the handicapped child experience a more difficult adjustment than do those who are younger than the handicapped child (Cleveland & Miller, 1977; Farber & Rychman, 1965; Gath, 1973, 1974; Grossman, 1972). Simeonsson and McHale (1981) found evidence, however, that younger nonhandicapped siblings displayed more adjustment problems, particularly during the childhood years. It has been noted that females seem to express more negative attitudes with regard to a handicapped sibling than do males, and also to interact more frequently with him or her (Farber, 1959, 1960; Gath, 1973, 1974; Taylor, 1974). It should be recalled that more sibling access tends to create more volatile sibling relations (Bank & Kahn, 1982). Meissner (1970) found that same-sex siblings seem more negatively affected than are cross-sex siblings of handicapped children, which seems consistent with data obtained by both Farber and Jenne (1963) and Grossman (1972). Finally, it has been observed that siblings of both sexes that are near in age to the handicapped child seem to experience more adjustment problems, and more negative sibling attitudes, than do the other children in the family (Abrams & Kaslow, 1976).

Some characteristics of the handicapped child also seem to affect sibling attitude development. Handicapped brothers may impede the adjustment of the nonhandicapped siblings more than do handicapped sisters, particularly as they get older (Farber & Jenne, 1963; Simeonsson & McHale, 1981). This may in part be a consequence of societal expectations around achievement for males. The type of handicap presented by the child also seems to significantly influence sibling attitudes (Simeonsson & McHale, 1981). Severely handicapped children present more adjustment problems, especially for their sisters, who are likely expected to assist with caretaking (Grossman, 1972). Fotheringham and Creal (1974) found that handicapping conditions which adversely affect the child's



physical appearance may negatively influence sibling attitudes. Simeonsson and McHale (1981) noted, however, that visible and clearly defined handicaps made for easier sibling adjustment, and more positive sibling attitudes, than did ambiguous ones.

Parental attitudes often serve to determine those adopted by their children. Grossman (1972) found that the attitudes of middle-class college students with handicapped siblings were, for the most part, predictable from those of their parents. It seems likely that individuals belonging to families are not immune to the effects of stresses concentrated in the other members. It seems likely, therefore, that when parents demonstrate acceptance of the handicapped child, the siblings follow their lead (Caldwell & Guze, 1960). Socioeconomic status of the family also seems related to the effects of the handicapped child on parental adjustment. Lower-class families tend to respond more to the daily demands presented by a highly dependent member, and to experience crises in response to a lack of resources to use in meeting daily needs (Dunlap, 1976; Taylor, 1974). Middle-class families, on the other hand, seem to respond to the limitations imposed by the handicapping condition, and to experience their crises in response to destroyed expectations (Grossman, 1972; Simeonsson & McHale, 1981). In addition, it has been noted that larger families cope better, and may facilitate more positive sibling adjustment to a handicapped sibling (Taylor, 1974). This seems due to two major factors: (1) the parents may have their aspirations met by other children, so they do not pass along an attitude of disappointment and (2) care-taking responsibilities may be spread among many individuals.

Somewhat related to the impact of parental attitudes on the adjustment of children with handicapped brothers or sisters is the observation that providing

family members with clear and complete information regarding the nature and meaning of the child's handicapping condition seems to foster family acceptance. Often families are reluctant to discuss the handicapped child's difficulties (Poznanski, 1973), and the entire situation becomes shrouded in mystery, fear, and fantasy (Cleveland & Miller, 1977; Kaplan, 1969). Kaplan (1969) found that the dishonesty of the communication around this issue may create a general distrust that carries over into other aspects of family life. Extensive, open parental communication with the nonhandicapped children regarding the impact of sibling's disability has a major influence on the understanding that they display (Klein, 1972a, 1972b; Schreiber & Feeley, 1965), and on the attitudes which they develop with regard to him/her (Farber & Jenne, 1963; Maki, 1977; O'Connor & Stachowiak, 1971; Taylor, 1974). In addition to general information, the nonhandicapped children in the family seem to need opportunities to develop specific skills for use when interacting with their handicapped brother or sister. Involvement in some sort of training program may have the effect of increasing the frequency of positive interactions within the sibling subsystem, thereby fostering the development of more positive feelings about those interactions (Cansler & Martin, 1973; Lavigueur, 1976; Miller & Cantwell, 1976; Weinrott, 1974).

Lastly, research has indicated that children develop their attitudes toward the handicapped at a very early age (Richardson, 1970; Scheff, 1966; Weinberg, 1978; Wilkins & Velicer, 1980). Wilkins and Velicer (1980) found that elementary school children perceived mentally retarded and physically handicapped children as less active, less potent, and less understandable than nonhandicapped individuals, and that they evaluated them more negatively. Weinberg (1978) determined that children as young as four years of age found physically

handicapped children to be less attractive, and less desirable as playmates than were their able-bodied peers. It seems likely that these kinds of attitudes have some impact for the brothers and sisters of handicapped children, although how they are mediated by the feelings and cognitions inherent in a sibling relationship, and by parental pressures, is unclear.

#### Research Problems and Sibling Attitudes

Research directed at measuring sibling attitudes is complicated, and has been viewed critically due to a number of factors inherent in the subject under investigation. Sibling attitudes develop within the context of the family system, and therefore in response to a myriad of potentially interactive variables such as age, birth order, and gender of each child; parental attitudes and values; family characteristics that evolve from socioeconomic status, family size, and religious beliefs (Koch, 1956, 1960; Pfouts, 1976; Simeonsson & McHale, 1981). Only extremely complex experimental designs could begin to adequately control for all, or even a significant number of these. Furthermore, the results of most studies are somewhat difficult to interpret due to potential sources of experimenter bias such as cultural stereotypes, sex-role expectations, and personal values. In addition, the emotionality that characterizes most family relationships interferes with the collection of clear, objective data.

Additional issues have been noted in previous efforts to evaluate the attitudes that children have toward their handicapped siblings (Simeonsson & McHale, 1981):

- (1) Most efforts to evaluate sibling attitudes have used measures completed by parents or teachers, rather than by the children themselves (Dunlap, 1976; Farber, 1959, 1960; Lloyd-Bostock, 1976; Schwirian, 1976).

- (2) Few studies have used control groups of nonhandicapped siblings as an anchor point against which to evaluate the data secured from siblings of handicapped children regarding sibling attitudes (Caldwell & Guze, 1960; Farber, 1959, 1960).
- (3) Typical designs for assessing attitudes of siblings of handicapped children have relied upon clinical data and small samples, thereby eliminating from inclusion those families which seem to be functioning relatively effectively, and the possibility of applying parametric statistics to the data secured (Lavine, 1977; Poznanski, 1973; Schwirian, 1976).
- (4) Rarely have multivariate designs been used in studies of sibling attitudes, which eliminates the possibility of considering interaction effects which may serve to impact their development (Simeonsson & McHale, 1981).

These research problems may be related to the lack of consistency noted with regard to the results of previous studies assessing children's attitudes toward a handicapped sibling.

## CHAPTER III

### Method

#### Subjects

Participants in the study were 60 elementary school-aged children who had siblings enrolled in public school elementary classes, public school special education classes, or agency programs for the developmentally disabled. All of the children were white, and from intact, middle-class families (annual family income \$15,000-\$30,000). The subjects ranged in age from five to eleven years, with their birth interval from their handicapped (or designated nonhandicapped) sibling ranging from 16 to 48 months. Twenty-seven were male; 33 were female.

Subjects were selected from families who volunteered to participate, and who met the criteria for inclusion in one of the twelve cells defined by the experimental design of the study. Cell assignment was determined by parent responses to the Family Structure Questionnaire (see Appendix C). The first five child-sibling pairs assigned to each cell were selected as subjects, and asked, with their parent, to sign a form giving their consent to participate in the study (see Appendix D). Participation was limited to one child-sibling pair per family (see Table I for subject assignment breakdown).

#### Procedure

This study was developed in two stages. Stage One involved the construction and field testing of the two scales used as dependent measures in

the study. Stage Two involved the administration of the measures, and the analysis of the data obtained.

TABLE 1

Subject Assignment

Group	Family Position	Gender
Nonhandicapped	Older than sibling	Same sex
	Older than sibling	Cross sex
	Younger than sibling	Same sex
	Younger than sibling	Cross sex
Mildly-to-moderately handicapped	Older than sibling	Same sex
	Older than sibling	Cross sex
	Younger than sibling	Same sex
	Younger than sibling	Cross sex
Severely-to-profoundly handicapped	Older than sibling	Same sex
	Older than sibling	Cross sex
	Younger than sibling	Same sex
	Younger than sibling	Cross sex

Stage One. The Sibling Attitude Scale (SAS) was developed as a self-report measure of children's attitudes toward their siblings. It was constructed as a five-choice Likert (1932) scale, with response options ranging from agree to disagree. The response sheet consists of a series of smiling/frowning faces corresponding to level of agreement with each of the items on the scale. This format was previously employed by Simpson, Parrish, and Cook (1976) with

children as young as five years of age, and was found to be a developmentally appropriate one.

The scale itself consists of 25 items tapping cognitive, affective, and behavioral correlates of children's attitudes across a range of sibling relationship issues (see Table 2).

TABLE 2

Sample Items from the SAS

Relationship Issue	Related Items
Sibling identification	I wish I looked more like _____. _____ and I agree about most things.
Relationship with sibling	I like to play with _____ a lot of the time. _____ takes good care of my things.
Sibling rivalry	I wish I could trade places with _____. I can do lots of things _____ can't do.
Sibling dependency	I help take care of _____ a lot of the time. _____ helps me with things that I have to do.
Relationship with parents	When I fight with _____, Mom takes my side when I'm in the right. Dad spends as much time with me as he does with _____.

continued

Relationship Issue	Related Items
Relationship with peers	My friends don't mind it when _____ plays with us.  When I go places with friends, I like for _____ to come along.

Thirteen of the 25 items were adapted from those used by Koch in a 1956 study of sibling attitudes. Twelve additional items were constructed to address relevant issues identified by the literature as significant to the development of sibling attitudes.

The Role Tension Behavioral Rating Scale (RTBRS) was developed as a self-report measure of the behavioral correlates of role tension described by Farber (1959). It was constructed as a summated ratings scale, with five response options ranging from always to never. The response sheet consists of a series of frowning/smiling faces corresponding to the frequency of occurrence of the behavior or feeling identified by each item on the scale.

This instrument consists of 20 statements designed to address the following personal/social issues: dependency, sensitivity to criticism, moodiness, tendency to become overly-excited, quickness to anger, irritability, jealousy, bossiness, stubbornness, and self-centeredness (see Table 3).



TABLE 3

Sample Items from the RTBRS

Personal/Social Behavior	Related Items
Dependency; sensitivity to criticism	My feelings get hurt easily. Children don't like me as much as they do other people.
Moodiness; tendency to become overly-excited	I just wake up in a bad mood. I get mad for no real reason.
Quickness to anger; irritability	I lose my temper easily. I get upset over little things not going my way.
Jealousy; bossiness	Other children get to do things I don't get to do. Other children think I'm bossy.
Stubbornness; self-centeredness	If I get into a fight, I'm in the right. When I fight, I fight to the finish.






Twelve of the items were adapted from a questionnaire developed by Rutter (1967) to assess parent/teacher perceptions of children's behavior. Eight additional items were constructed to more specifically tap Farber's (1959) correlates of role tension.

Following the construction of the two scales, field testing was conducted by administering each of them orally to six children (mean age 8 years). Each child was interviewed after the administration session in order to evaluate the reliability of the items, and to address any confusion with regard to their

wording. Minor changes were made in the structure of four items on the SAS and six items on the RTBRS in accordance with the children's performance during field testing, and their comments during follow-up questioning.

Phase Two. Both the SAS and the RTBRS were administered orally and individually to the 60 subjects forming the study sample. This method was selected in order to insure confidentiality, and to control for any reading problems. Each subject completed first the SAS (see Appendix A), then the RTBRS (see Appendix B). Instructions were read verbatim. After completion of the scales, each subject was instructed to place his or her answer sheets in an envelope, seal it, and present it to the examiner.

The SAS was scored as follows:

-  5 points
-  4 points
-  3 points
-  2 points
-  1 point

Item scores were summed, with higher scores indicating more positive sibling attitudes.

The RTBRS was scored in the same manner. Item scores were again summed, with higher scores indicating poorer personal/social adjustment, and more role tension.

### Design and Analysis

The research design employed utilized two groups of subjects with handicapped siblings (mildly-to-moderately retarded, severely-to-profoundly handicapped), and a comparison group of subjects with nonhandicapped siblings.

Independent variables controlled for by the design of the study included:

- (1) socioeconomic status of the family.
- (2) family size.
- (3) ethnicity.
- (4) age of the nonhandicapped child.
- (5) age of the handicapped child (or designated sibling).
- (6) birth interval between the subject and the handicapped child (or designated sibling).

Independent variables to be analyzed in the study included:

- (1) birth order of the handicapped child (or designated sibling) relative to the subject.
- (2) gender of the handicapped child (or designated sibling) relative to the subject.
- (3) severity of the handicapped child's disability.

The research hypotheses were tested with a 3 X 2 X 2 (handicap group X relative family position X relative gender) multivariate technique (MANOVA). A separate 3 X 2 X 2 analysis of variance procedure (ANOVA) was also conducted with regard to each of the dependent measures in order to evaluate interaction effects.

## CHAPTER IV

### Results

A 3 X 2 X 2 multivariate analysis of variance (MANOVA) was conducted to examine the influence of sibling handicap, family position, and relative gender on the sibling attitudes (as measured by the SAS) and level of personal/social adjustment (as measured by the RTBRS) expressed by the subjects of the study (see Table 4). Results indicated that there were differences in sibling attitudes and/or level of personal/social adjustment as a function of sibling handicap ( $F_{4,110} = 8.40, p = 0.0001$ ).

TABLE 4

Multivariate Analysis of Variance on Subject Scores on SAS and RTBRS (Pillai's Trace)

Source of variation	df	F	p
Severity of handicap	4, 110	8.40	0.0001
Relative family position	2, 54	1.53	> 0.0500
Relative gender	2, 54	0.17	> 0.0500

Specific hypotheses were tested with two separate analysis of variance techniques (ANOVA).

To test Hypothesis 1 regarding the influence of sibling handicap on subject expressed attitudes, a 3 X 2 X 2 ANOVA was performed on subject Sibling Attitude Scale (SAS) scores (see Table 5). Sibling handicap represented a main effect in that model. The results were in support of the alternative hypothesis, suggesting that siblings of handicapped children reported different sibling attitudes than did siblings of nonhandicapped children ( $F_{2,48} = 17.70, p = 0.0001$ ). Table 6 presents the SAS ANOVA as a function of the sources of variation present in the model.

TABLE 5

Analysis of Variance on SAS Scores

Source	df	SS	MS	Fa
Model	11	12441.9333	1131.3575	5.00*
Error	48	10860.0000	226.2500	
Corrected total	59	23301.9333		

\*p = 0.0001

a df = 11,48

Dunn's mean comparison procedure was used to test Hypothesis 1.1, which addressed the differential impact of severity of sibling handicap on reported sibling attitudes. Means and standard deviations of subject scores on the SAS by severity of sibling handicap are presented in Table 7. Results of the procedure indicated that there was no support for the alternative hypothesis, which

predicted differences between the means of the mildly-to-moderately retarded and the severely-to-profoundly handicapped groups ( $t_{48} = 0.8620$ ,  $p > 0.05$ ).

TABLE 6

Sources of Variation in Analysis of Variance on SAS Scores

Source of variation	df	MS	F	p
Severity of handicap (H)	2	4004.9667	17.70	0.0001
Family position (FP)	1	763.2656	3.37	> 0.0500
Relative gender (G)	1	2.4000	0.01	> 0.0500
H X FP	2	102.7667	0.46	> 0.0500
H X G	2	977.7000	4.32	> 0.0500
FP X G	1	35.2667	0.16	> 0.0500
H X FP X G	2	736.0667	3.25	0.0473

TABLE 7

Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap

	Nonhandicapped	Mildly/Moderately Retarded	Severely/Profoundly Handicapped
Mean	71.7000	93.9000	98.0000
SD	19.2575	14.4545	15.9987

Note.  $p = 0.05$  for all computed means and standard deviations.

Hypothesis 1.2 (concerning the impact of the gender of the handicapped sibling relative to that of the subject) was tested as an interaction effect in the SAS ANOVA (H X G). Table 8 presents the means and standard deviations of subject SAS scores by severity of handicap and relative gender.

TABLE 8

Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap and Relative Gender

		Severity of Handicap		
		Nonhandicapped	Mild-Moderate Retardation	Severe/Profound Handicapped
Same-sex	M	69.4000	38.7000	106.1000
	SD	21.6805	13.5732	11.7704
Cross-sex	M	74.0000	99.1000	84.9000
	SD	17.3525	9.2000	13.8279

Note.  $p = .05$  for all computed means and standard deviations.

Results were in support of the null hypothesis, predicting no differences between the means of same-sex siblings and cross-sex siblings of handicapped children ( $F_{2,48} = 4.32, p. > 0.05$ ).

Hypothesis 1.3, concerning the impact of the relative family position of the handicapped child on the sibling attitudes expressed by the nonhandicapped brother or sister, was also tested as an interaction effect in the SAS ANOVA

(H X FP). Table 9 presents the means and standard deviations of subject SAS scores by severity of sibling handicap and relative family position. The results obtained were in support of the null hypothesis, predicting no differences between the means of older siblings and younger siblings of handicapped children ( $F_{2,48} = 0.16, p > 0.05$ ).

TABLE 9

Means and Standard Deviations of SAS Scores by Severity of Sibling Handicap and Relative Family Position

		Severity of Handicap		
			Mild-Moderate	Severe/Profound
Family Position		Nonhandicapped	Retardation	Handicapped
Younger	M	65.7000	92.4000	94.8000
	SD	18.3306	11.9554	16.5985
Older	M	77.7000	95.4000	101.2000
	SD	19.1546	9.5271	13.3149

Note.  $p = 0.05$  for all computed means and standard deviations.

Although no specific hypothesis was generated concerning the interaction of sibling handicap and family position and relative gender (H X FP X G) with relationship to sibling attitudes expressed by the subjects, a statistically significant difference was determined ( $F_{2,48} = 3.25, p = 0.0473$ ).



A separate ANOVA was performed to test Hypothesis 2 and its related hypotheses 2.1, 2.2, and 2.3. Subject scores on the RTBRS (Role Tension Behavioral Rating Scale) served as the dependent measure for this procedure. Results of this analysis are presented in Table 10.

Hypothesis 2 concerned the influence of sibling handicap on subject expressed level of personal/social adjustment as measured by the RTBRS. Sibling handicap represented a main effect in the ANOVA model. The results were in support of the alternative hypothesis, suggesting that the RTBRS scores did vary as a function of sibling handicap ( $F_{2,48} = 3.75$ ,  $p = 0.0307$ ). See Table 11 for a presentation of the sources of variation in the RTBRS ANOVA.

TABLE 10

Analysis of Variance on RTBRS Scores

Source	df	SS	MS	F <sup>a</sup>
Model	11	2013.2000	183.0182	1.62*
Error	48	5436.4000	113.2583	
Corrected Total	59	7449.6000		

\* $p = 0.05$

<sup>a</sup>df = 11,48

TABLE 11

Sources of Variation in Analysis of Variance on RTBRS Scores

Source of variation	df	MS	F	p
Severity of handicap (H)	2	424.5500	3.75	0.0307
Family position (FP)	1	0.6000	0.01	0.0500
Relative gender (G)	1	41.6667	0.37	0.0500
H X FP	2	156.9500	1.39	0.0500
H X G	2	218.5166	1.93	0.0500
FP X G	2	6.6667	0.06	0.0500
H X FP X G	2	182.1166	1.61	0.0500

Hypothesis 2.1 addressed the differential impact of severity of sibling handicap on the level of personal/social adjustment reported by subjects on the RTBRS. Application of Dunn's procedure for individual mean comparisons indicated that the comparison of mean scores of the siblings of mildly-to-moderately retarded children with those of the siblings of severely-to-profoundly handicapped children yielded results in support of the alternative hypothesis ( $t_{48} = 2.48$ ,  $p = 0.05$ ). The direction of difference indicated that subjects with mildly/moderately retarded siblings reported lower levels of personal/social adjustment than did subjects with severely/profoundly handicapped siblings (see Table 12 for the means and standard deviations of subject scores on the RTBRS by severity of sibling handicap).

TABLE 12

Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap

	Nonhandicapped	Mildly/Moderately Retarded	Severely/Profoundly Handicapped
Mean	60.5500	68.1000	59.7500
SD	9.9180	10.0371	11.6568

Note.  $p = 0.05$  for all computed means and standard deviations

Hypothesis 2.2 concerned the influence of the gender of the handicapped child relative to that of the nonhandicapped child on the level of personal/social adjustment expressed by the subjects of the study. Table 13 presents the means and standard deviations of subject scores on the RTBRS by severity of sibling handicap and relative gender.

TABLE 13

Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap and Relative Gender

		Severity of Handicap		
		Nonhandicapped	Mild-Moderate Retardation	Severe/Profound Handicapped
Same-sex	M	59.5000	67.0000	64.4000
	SD	9.3838	9.8201	6.3281
Cross-sex	M	61.6000	69.2000	55.1000
	SD	10.8238	11.8201	14.0985

Note.  $p = 0.05$  for all computed means and standard deviations

This hypothesis was tested as an interaction effect in the RTBRS ANOVA, with results obtained that were consistent with the null hypothesis (no difference in subject level of personal/social adjustment as a function of relative gender of the handicapped child). The H X G interaction yielded the following:

$F_{2,48} = 1.93, p = 0.05$ .

Hypothesis 2.3 addressed the impact of the relative family position of the handicapped child on the level of personal/social adjustment reported by the nonhandicapped sibling, and was tested as an interaction effect in the RTBRS ANOVA (H X FP). Means and standard deviations of subject RTBRS scores by severity of sibling handicap and relative family position are presented in Table 14.

TABLE 14

Means and Standard Deviations of RTBRS Scores by Severity of Sibling Handicap and Relative Family Position

		Severity of Handicap		
		Nonhandicapped	Mild-Moderate Retardation	Severe/Profound Handicapped
Younger	M	57.9000	68.1000	62.7000
	SD	10.7336	12.1695	10.0506
Older	M	63.2000	68.1000	56.8000
	SD	8.7660	9.5272	12.8995

Note.  $p = 0.05$  for all computed means and standard deviations.

Results were non-significant, lending no support to the alternative hypothesis ( $F_{2,48} = 1.39, p > 0.05$ ), and suggesting no differences in sibling personal/social adjustment as a function of the relative family position of the handicapped child.

Although no specific hypotheses were generated concerning the correlation between sibling attitudes (as measured by the SAS) and level of personal/social adjustment (as measured by the RTBRS) reported by subjects, post hoc Pearson Product-Moment Correlation Coefficients were calculated for the two dependent measures as a function of each variable and combination of variables included in the experiment. Table 15 presents the resulting correlations which met the designated cut-off of  $p < 0.15$ .

TABLE 15

Pearson Product-Moment Correlation Coefficients\* for SAS and RTBRS Scores  
by Subject Cell(s)

Subject Cell(s)	R	p
Total sample	0.2245	0.0800
Subjects with severely/profoundly handicapped siblings	0.3490	0.1315
Subjects with cross-sex siblings	0.3605	0.0503
Subjects with younger siblings	0.3774	0.0398
Subjects with cross-sex, younger siblings	0.5943	0.0195
Subjects with cross-sex, older severely/profoundly handicapped siblings	0.7633	0.1332
Subjects with cross-sex, younger, nonhandicapped siblings	0.7742	0.1243
Subjects with cross-sex, older, mildly/moderately retarded siblings	0.8065	0.0991

\*p < 0.15

## CHAPTER V

### Discussion and Conclusions

The specific purpose of this study was to determine whether or not children report different sibling attitudes and/or level of personal/social adjustment as a consequence of having a handicapped brother or sister. The analyses of the data revealed that elementary school-aged children with handicapped siblings expressed significantly more positive sibling attitudes than did a comparison group of children with nonhandicapped brothers or sisters. In addition, siblings of mildly-to-moderately retarded children reported significantly lower levels of personal/social adjustment than did children with nonhandicapped or severely-to-profoundly handicapped brothers or sisters. Neither the relative gender (same-sex vs. cross-sex) nor the relative family position (older vs. younger) of the handicapped child had any significant impact on either expressed attitudes or level of personal/social adjustment.

The results of post hoc correlational analyses indicated that sibling attitudes and level of personal/social adjustment were not significantly correlated as a function of sibling handicap. Any statistically meaningful correlations between Sibling Attitude Scale and Role Tension Behavioral Rating Scale scores were difficult to interpret, and generally suggested that better attitudes were accompanied by higher levels of personal/social adjustment difficulties. In fact, it was noted that cross-sex, younger children had the more highly correlated scores, regardless of sibling handicap. Moderate correlations

( $R = 0.76 - 0.80$ ) were noted between SAS scores and scores on the RTBRS for subjects with cross-sex, older handicapped siblings, but these were based on very small cell sizes ( $n = 5$ ), and therefore should be interpreted carefully.

This chapter presents a discussion of these results, as well as limitations of the study and implications for its clinical application.

### Hypothesis 1

This study provided significant support for the hypothesis that children with handicapped siblings express different attitudes toward their brothers or sisters than do children with nonhandicapped siblings. Some differences might have been predicted from an examination of previous research (Barsch, 1961; Farber, 1959, 1960; Gath, 1973, 1974). The results of the study, however, were opposite in direction from expectation, with siblings of handicapped children expressing more positive attitudes than did siblings of nonhandicapped children.

There have been a number of studies which determined that children with handicapped brothers or sisters form sibling relationships that are at least equally positive and healthy as are those established between pairs of nonhandicapped children. Lavine (1977) found virtually no differences between the way a blind child formed a relationship or interacted with a sibling and the manner that was observed in the sibling relationships of sighted children. Schwirian (1976) stated similar conclusions with regard to hearing-impaired preschoolers and their brothers or sisters. Studies of siblings of mentally retarded (Grallicker, Fisher, & Koch, 1962), physically handicapped (McAndrew, 1976), and autistic (Berger, 1981; McHale, Simeonsson, & Sloan, in preparation) children found that they, too, were typically able to establish solid relationships with their sisters or brothers. The fact that the siblings of the handicapped children in this study reported significantly more positive attitudes toward their



brothers or sisters may be, in part, explained by examining several relevant interpersonal (especially family system) and intrapersonal issues, and recent changes with regard to the availability of support services for handicapped children and their families.

Both Bank and Kahn (1977) and Boszormenyi-Nagi and Spark (1973) have commented upon the importance of loyalty between siblings, describing it as "the keystone of sibling relationships" (Bank & Kahn, 1977, p. 494). Although this loyalty may be threatened in the family facing the daily stresses and challenges of life with a disabled child, it may also be intensified by a human tendency to "pull for the underdog". Clinical, historical, and fictional literature offer many examples of the tremendous dedication to another that may emerge when a loved one is seen as vulnerable to or isolated from the rest of society. Siblings of handicapped children may thus report positive sibling attitudes in response to a strong sense of loyalty and commitment to their brothers or sisters.

If loyalty is part of being a sibling, so is competition for love, approval, privileges, and dominance (Adler, 1939; Ihinger, 1975; Koch, 1956, 1960). This competition serves as a great contributor to sibling conflict and emotional ambivalence, and in that manner influences the developing sibling relationship. It seems clear that a handicapped child brings with him or her some genuine deficits (cognitive, social, physical) as a competitor in most areas of daily life. As noted by Koch (1956), children recognize only "fair" arenas in which to challenge their siblings, arenas where each individual possesses the skills and abilities necessary to compete effectively. It is likely, therefore, that children with disabled brothers or sisters have fewer experiences where they feel in direct competition with their siblings, and come to be more protective and

accepting of them than do children who do regular battle with siblings who are more truly their peers.

Operating in conjunction with this reluctance to compete with a sibling presenting disparate skills and abilities is Ihinger's (1975) observation that children will accept as being "fair" inequitable distributions of parental time and approval, if such distribution is governed by consistent, commonly-held standards. It seems likely that in a family with a handicapped child all members acknowledge that that child demands some special consideration and some special concessions, and indeed receives such on a regular basis. These basic inequities may ultimately be supported by family norms, and sibling rivalry/jealousy thereby kept at a very low level. Such a situation should serve to foster more positive sibling attitudes.

The impact of the family on sibling attitudes extends beyond the setting and maintaining of rules for distribution of parental favors. It has been consistently noted that the single greatest determinant of a child's attitudes toward a handicapped sibling is the adjustment made by the family as a whole (Grossman, 1972). The past ten years have seen a proliferation of programs directed at providing early intervention, special training, and emotional support for handicapped children and their families. The availability of such resources has likely contributed to reducing parental stress and feelings of hopelessness, and generally facilitated the development of more effective coping styles (Bristol, 1979). The children, who tend to be highly vulnerable to family distress and discord (Farber, 1959), are perhaps profiting from this increased parental stability. They may be learning more flexibility and adopting more tolerant attitudes toward their handicapped brothers or sisters because their own needs

for a secure and stable family system are being more effectively met than was true in the past.

Along with the recent focus on early intervention has come a heightened awareness of the issues and concerns confronting the families of handicapped children (Featherstone, 1980). The parents, in response to guidance from professionals, may be beginning to take more responsibility for helping their nonhandicapped children negotiate sibling conflict, and acknowledge negative feelings for their handicapped brother/sister as well as positive ones. This more open, honest confrontation of the stressful aspects of a sibling relationship may be serving to enhance the nonhandicapped child's level of competency, and increasing her/his options for problem-solving conflict. Certainly it should serve to make each child feel more understood and appreciated, thereby fostering the development of personal resources upon which to draw in times of stress. A logical consequence of this parental support would be an increased frequency of satisfying family interactions, leading to more positive sibling contact.

It is possible, of course, that the highly positive attitudes expressed by the children in this study were not the consequence of their having established better, more flexible sibling relationships, but rather the result of attempts at over-compensation, or some other defensive reaction to strong negative feelings with regard to their handicapped brothers or sisters. Certainly cognitive dissonance could have played a role ("I have to love/care for/protect my sibling because he or she is special/crippled/handicapped."). While such feelings probably did contribute to the reactions of some of the children, it seems unlikely that they were so pervasive as to influence all subjects across the total range of issues presented by the scale administered.

Tests of the hypotheses addressing the differential impact of severity of sibling handicap, sibling relative family position, and sibling relative gender (same-sex vs. cross-sex) on the sibling attitudes of the subjects did not achieve statistical significance. It remains likely, however, that a number of variables interact to influence the attitudes that a nonhandicapped child develops toward a handicapped sibling. Certainly previous research has granted the above mentioned variables considerable importance (Farber, 1959, 1960; Simeonsson & McHale, 1981). Perhaps the relative importance of any single interpersonal or intrapersonal factor varies within the total context of the family system. The fact that the three-way interaction of handicap X gender X family position showed greater mean differences between groups than did any of the two-way interactions tested would lend support to this hypothesis.

It may have been that the narrow age range represented in this study served to mediate the influence of variables like severity of handicap and relative family position. Pre-adolescent children likely have not yet been encouraged to assume the parent-like roles with regard to their handicapped siblings as have been described by Farber (1959, 1960) and Boszormenyi-Nagi and Spark (1973). Their own cognitive and emotional immaturity would set some limits on the kinds of care-taking responsibilities which they could reasonably assume.

The availability of daycare, respite care, and educational programs may also have exerted some influence on the families represented in this research. Ten years ago, prior to the Education for All Handicapped Children Act (P.L. 94-142), the family system had virtually no outside help with the daily care of a handicapped member, so that the other children had to assume some part of that burden, perhaps long before they might realistically be expected to do so. Other

resources may now be available to assume some of the maternal relief function previously assigned to siblings (Mates, 1982). This would free those siblings to relate to the handicapped child from the more comfortable role of peer, and facilitate their viewing their sibling relationship in a more positive fashion.

### Hypothesis 2

The second set of hypotheses concerned the level of personal/social adjustment reported by siblings of handicapped children. While results of the 3 X 2 X 2 ANOVA performed on the RTBRS scores did not suggest the presence of any significant overall mean differences between groups, a statistically significant main effect for sibling handicap was observed ( $p = 0.03$ ). Dunn's mean comparison procedure indicated that siblings of mildly/moderately retarded children reported lower levels of personal/social adjustment than did siblings of nonhandicapped children, or siblings of severely/profoundly handicapped children ( $p = 0.05$ ).

Given that the RTBRS was modeled on Farber's (1959) role tension construct, it seems important that children with handicapped siblings reported higher scores on the scale, and thereby more role tension, than did children with nonhandicapped siblings. Such consistency lends some validity to both the scale, and Farber's original observations. Contrary to Farber's observations, however, it was not the children with the more severely handicapped siblings who reported higher levels of role tension, but rather those with mildly-to-moderately retarded siblings.

Farber's concept of role tension was based on the notion that children with handicapped siblings typically are required to assume duties that are incongruent with their ages and family roles. He found that they tended to show more problems in adjustment when they were placed in a position where they had to

take a great deal of responsibility for the handicapped child (Farber, 1959; McHale, Simeonsson, & Sloan, in preparation). Young severely/profoundly handicapped children, particularly those who are nonambulatory, basically require the kinds of care and support typically offered to infants. The pre-adolescent children included in this study would lack both the physical strength and the social/emotional maturity to take on the custodial care required for their daily maintenance. Those with mildly/moderately retarded siblings, however, were likely already being assigned babysitting or other kinds of monitoring functions on a regular basis. Thus the demands on them to assume some responsibility for their handicapped brothers or sisters may actually have been greater than were those placed on children with more severely handicapped siblings.

It also seems more likely that siblings of mild-to-moderately retarded children experience more of the over-identification problems described by Grossman (1972) and Kaplan (1969), among others. The significant differences in appearance and abilities presented by severely/profoundly handicapped children are probably more clearly apparent to young brothers or sisters than are the relatively subtle delays and deviations noted in young mildly retarded children. The stresses and concerns that might result in siblings worried that they might be "too much" like the disabled child would tend to have a detrimental effect on their overall personal/social adjustment.

Hypothesis 2 also addressed the impact that the family position (older vs. younger) and relative gender (same-sex vs. cross-sex) of the handicapped child might have on the personal/social adjustment of the nonhandicapped child. No support for the alternative hypothesis was determined with regard to either of these variables. Many studies have suggested that older siblings of handicapped

children experience more adjustment problems and display more deviant (especially antisocial) behavior than do younger siblings (Farber, 1959, 1960; Gath, 1973, 1974; Simeonsson & McHale, 1981), largely due to the parentification of their family roles. The failure of this study to find comparable results could possibly be attributed to (1) the relative immaturity of the subjects involved, and (2) the increased availability of outside resources upon which parents can rely to augment the support provided by other family members. The alternative hypothesis suggesting that same-sex siblings of handicapped children experience more personal/social adjustment problems than do cross-sex siblings was based on the identification literature (Bank & Kahn, 1982; Grossman, 1972; Koch, 1956, 1960). This study's lack of support for this difference may be a reflection of the children's greater access to good information regarding the etiology of developmental disabilities following the advent of mainstreaming as an outgrowth of the Education for all Handicapped Children Act (P.L. 94-142).

#### Correlation Between Sibling Attitudes and Adjustment

One of the problems involved in reviewing previous research with siblings of handicapped children has been the determination of how personal/social stresses like role tension relate to the attitudes which the nonhandicapped siblings develop toward their disabled brothers or sisters. The results of the majority of the studies are difficult to interpret. Gath (1973) found a substantial number (75%) of siblings of children with Down's Syndrome to display deviant social behavior, yet the parents of the children generally rejected the handicapped child as the source of these problems. McAndrew's data (1976) has been frequently cited as indicative of the disruptive influence that a handicapped child has on her/his siblings, yet while 25% of the subjects were reported to have

significant adjustment problems, 50% were reported to have good attitudes concerning their handicapped siblings.

It is possible that for many children with reported personal/social adjustment difficulties, it is not the presence of a handicapped sibling, but rather the presence of any problem added to an already stressful situation that serves to affect their general level of adjustment (Gath, 1974; Schipper, 1959; Wing, 1969). Given the present data on this subject, it is simply not possible to draw any conclusions with regard to the cause of the behavioral and/or emotional difficulties noted in some siblings of handicapped children. It is also impossible to determine what impact, if any, those difficulties might have on their relationships with the other children in the family.

In attempting to address this issue, post hoc correlational analyses were done examining the relationship between subject scores on the Sibling Attitude Scale (SAS), and the Role Tension Behavioral Rating Scale (RTBRS). Results of these analyses suggested little or no relationship between expressed sibling attitudes and level of personal adjustment. Where meaningful relationships existed, the direction was positive, implying greater adjustment problems were accompanied by more positive sibling attitudes. This could be interpreted in at least three ways: (1) children with personal/social difficulties form strong bonds with their siblings, perhaps as a means of securing some support; (2) children who express positive sibling attitudes are defending against genuinely negative feelings, and these defenses result in anxiety, depression, or other personal/social difficulties; or (3) children with personal/social difficulties are driven to respond in socially appropriate ways to questions involving emotionally-laden issues like family relationships.



### Conclusions

Much of the previous literature pertaining to handicapped children and their siblings has seen the nonhandicapped brothers and sisters as being at-risk for problems in their personal/social adjustment, and in their relationships with their handicapped siblings (Simeonsson & McHale, 1981). There have been instances, however, where these children seemed to adjust well to their special family systems. The results of this study would suggest that:

- (1) In general, pre-adolescent siblings of handicapped children reported more positive sibling attitudes than did a comparison group of children with nonhandicapped brothers or sisters.
- (2) Pre-adolescent siblings of mildly/moderately handicapped children reported poorer personal/social adjustment than did comparison groups of children with severely/profoundly or nonhandicapped brothers or sisters.

It should also be noted that the self-report measures of sibling attitudes and level of personal/social adjustment used in this study produced findings somewhat different than those achieved by less direct means, such as parent or teacher questionnaires.

Post hoc correlational analyses evaluating the relationship between expressed sibling attitudes and level of personal/social adjustment were inconclusive.

### Limitations of the Study

Measures. Both the Sibling Attitude Scale (SAS) and the Role Tension Behavioral Rating Scale (RTBRS) were piloted in this study, and consequently need further evaluation in order to ascertain their reliability and validity.

Interpretations of the results obtained must therefore be viewed with some caution.

Although the SAS was constructed to survey a broad range of sibling relationship issues, it should be noted that it taps only a small sample of the multitude of potentially important aspects of this complex area of family life. Items were selected for their applicability to the comparison group of children with nonhandicapped siblings as well as to subjects with handicapped brothers or sisters. Due to this constraint, concerns which might be unique to children with handicapped siblings (such as the impact of having a sibling with gross physical anomalies) were virtually eliminated from consideration.

In developing the RTBRS an effort was made to generate and/or adapt items aimed at isolating behaviors characteristic of Farber's (1959) indices of role tension. While the face validity of that instrument seems adequate, obviously one or two isolated items cannot begin to tape the breadth of possible behavioral manifestations of constructs like depression or irritability. The primary limitations of this instrument are largely a consequence of the need to present somewhat abstract concepts in a manner developmentally appropriate for five-year-olds.

Further research is needed utilizing each measure in order to determine reliability coefficients and construct validity. Factor analyses should also be done in order to insure more meaningful interpretation of scores.

Sample. The homogeneity of the research sample with regard to ethnicity, socioeconomic status, and geographic location clearly limits the generalizability of these results. In addition, the restrictions imposed on both subject and sibling-of-subject ages confine the application of any conclusions to elementary school-aged children. Age may have had some impact on the results obtained,

since the majority of previous studies reporting positive sibling attitudes and good adjustment in siblings of handicapped children have focused on either latency aged (or pre-latency aged) children (Lavine, 1977; Schwirian, 1976), or retrospective accounts from adults (Grossman, 1972).

It should also be noted that despite efforts to account for as many potentially influential variables operative in a sibling relationship as possible, many were left free to interact with the independent variables in an undetermined manner (family religion, gender of child, access of child to information, for example). In order to restrict the sample size to a reasonable magnitude such compromises were necessary, but at the expense of losing certain, possibly valuable data.

Future research should be aimed at (1) obtaining SAS and RTBRS data from a comparable sample of adolescent siblings of adolescent handicapped persons and (2) employing a similar research design and the same dependent measures while addressing the influence of variables not included in this study.

#### Implications of the Study

The results of this study suggest that while some concern may be warranted with regard to the development of sibling attitudes and the personal/social adjustment of children with handicapped brothers or sisters, it should not be assumed that they are necessarily negatively affected. In fact, these children seemed to report more positive sibling attitudes than did the comparison group of children with nonhandicapped siblings.

It seems important to note, however, that some of the children with handicapped siblings experienced problems in the area of personal/social adjustment. While there was no evidence to suggest that their difficulties were

caused by their having a handicapped child in their families, certainly the added stresses that such a situation may create could have had some impact.

Perhaps it would be most appropriate to define siblings of handicapped children as being at-risk for problems in personal/social adjustment. Given the focus on prevention of mental health problems that represents a primary mandate of counseling psychology, they would therefore represent a relevant population for psychoeducational programming and support services. Providing such services could have implications for both primary and secondary prevention of long-term psychological and adjustment difficulties.

In addition, development of assessment tools like the Sibling Attitude Scale and the Role Tension Behavioral Rating Scale would allow for the periodic evaluation of the overall adjustment of siblings of handicapped children. The data collected could be used for both longitudinal and baseline comparisons at relevant points in the child's development. These comparisons might facilitate more prompt interventions for children who begin to show deficits in either their family relationships or their personal/social adjustment. Such data could also serve to create an empirical base for further research of the impact of handicapped children on their brothers and sisters.

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**APPENDIX A:**  
Sibling Attitude Scale

## Sibling Attitude Scale

## Directions

Here are some sentences that tell how some brothers and sisters feel they get along together. As you think about how things are between you and \_\_\_\_\_, think about whether you feel the same way that these other children do, or whether you feel differently than they do. Mark the face on your paper that best shows how you feel about each sentence.



The face with the big smile means that you agree with the sentence, that you feel just the way it says.



The face with the little smile means that you sort of agree with the sentence, that you feel something like that, but not just the way it says.



The middle face means that you aren't really sure how you feel about the sentence.



The face with the little frown means that you sort of disagree with the sentence, that it doesn't exactly describe how you feel, but it isn't exactly wrong either.





















































The face with the big frown means that you disagree with the sentence, that you feel very differently from the way it says.


























## SIBLING ATTITUDE SCALE

- (1) I like to play with \_\_\_\_\_ a lot of the time.
- (2) When I fight with \_\_\_\_\_, Mom takes my side when I'm in the right.
- (3) I like to help take care of \_\_\_\_\_.
- (4) I wish I looked more like \_\_\_\_\_.
- (5) I'd be unhappy if \_\_\_\_\_ weren't my brother/sister.
- (6) \_\_\_\_\_ and I agree about most things.
- (7) I'd rather play with \_\_\_\_\_ than play alone.
- (8) \_\_\_\_\_ takes good care of my things when she/he uses them.
- (9) When I get mad at \_\_\_\_\_, we work it out by ourselves.
- (10) When I go places with friends, I like for \_\_\_\_\_ to come along.
- (11) When I fight with \_\_\_\_\_, Dad takes my side when I'm in the right.
- (12) I like \_\_\_\_\_.
- (13) When I invite friends over to play, I like for \_\_\_\_\_ to play with us.
- (14) I'd rather play with \_\_\_\_\_ than play with other children I know.
- (15) I wish \_\_\_\_\_ were in my class at school.
- (16) Mom spends as much time with me as she does with \_\_\_\_\_.
- (17) I help take care of \_\_\_\_\_ a lot of the time.
- (18) I can do lots of things \_\_\_\_\_ can't do.
- (19) I wish I could trade places with \_\_\_\_\_.
- (20) Dad spends as much time with me as he does with \_\_\_\_\_.
- (21) \_\_\_\_\_ and I are alike in a lot of ways.
- (22) My friends don't mind it when \_\_\_\_\_ plays with us.
- (23) \_\_\_\_\_ helps me with things that I have to do.
- (24) \_\_\_\_\_ can do lots of things I can't do.
- (25) I help \_\_\_\_\_ with things that he/she has to do.

## SIBLING ATTITUDE SCALE

1.	disagree						agree
							
2.	disagree						agree
							
3.	disagree						agree
							
4.	disagree						agree
							
5.	disagree						agree
							
6.	disagree						agree
							
7.	disagree						agree
							
8.	disagree						agree
							
9.	disagree						agree
							
10.	disagree						agree
							

11. disagree agree
12. disagree agree
13. disagree agree
14. disagree agree
15. disagree agree
16. disagree agree
17. disagree agree
18. disagree agree
19. disagree agree
20. disagree agree

21. disagree agree
-     
22. disagree agree
-     
23. disagree agree
-     
24. disagree agree
-     
25. disagree agree
-     

**APPENDIX B:**  
**Role Tension Behavioral Rating Scale**

## Role Tension Behavior Rating Scale

## Directions

Here are some sentences that tell how some children feel about themselves. Think about whether you feel the same way that these other children do, or whether you feel differently than they do. Mark the face on your paper that best shows how you feel about each sentence.



The face with the big smile means that you never feel the way the sentence says.



The face with the little smile means that you might feel the way the sentence says every once in a while, but not very often.



The middle face means that sometimes you feel the way the sentence says and sometimes you don't.



The face with the little frown means that you feel the way the sentence says most of the time, but every once in a while you feel differently.





















































The face with the big frown means that you feel the way the sentence says all of the time, always.











































## ROLE TENSION BEHAVIORAL RATING SCALE

- (1) I have a hard time sitting still.
- (2) I get into fights with other children.
- (3) People seem to pick on me.
- (4) My feelings get hurt easily.
- (5) I have trouble finishing things that I start.
- (6) I don't like doing new things or meeting new people.
- (7) I bite my fingernails.
- (8) I feel sad.
- (9) I worry that things won't turn out the way I want them to.
- (10) I get mad for no real reason.
- (11) If I get into a fight, I'm usually in the right.
- (12) Children don't like me as much as they do other people.
- (13) I get upset over little things not going my way.
- (14) I lose my temper easily.
- (15) Other children get to do things that I don't get to do.
- (16) I cry easily.
- (17) Other children think I'm bossy.
- (18) When I fight, I fight to the finish.
- (19) I like to be the leader in a group.
- (20) I just wake up in a bad mood.

## ROLE TENSION BEHAVIOR RATING SCALE

1.	<u>always</u>				<u>never</u>
					
2.	<u>always</u>				<u>never</u>
					
3.	<u>always</u>				<u>never</u>
					
4.	<u>always</u>				<u>never</u>
					
5.	<u>always</u>				<u>never</u>
					
6.	<u>always</u>				<u>never</u>
					
7.	<u>always</u>				<u>never</u>
					
8.	<u>always</u>				<u>never</u>
					
9.	<u>always</u>				<u>never</u>
					
10.	<u>always</u>				<u>never</u>
					

11. always never  
    
12. always never  
    
13. always never  
    
14. always never  
    
15. always never  
    
16. always never  
    
17. always never  
    
18. always never  
    
19. always never  
    
20. always never  
    

## APPENDIX C

### Family Structure Questionnaire

## Family Structure Questionnaire

Family ID# \_\_\_\_\_

1. Number of permanent members of the household \_\_\_\_\_

2. Annual family income

Below \$15,000 \_\_\_\_\_

\$15,000 to \$30,000 \_\_\_\_\_

Above \$30,000 \_\_\_\_\_

3. Single parent family \_\_\_\_\_

Two parent family \_\_\_\_\_

4. Number of children of BOTH parents \_\_\_\_\_

<u>First name</u>	<u>Age</u>	<u>SUBJECT</u>	<u>SIBLING</u>
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1.

2.

3.

5. Diagnosis given to handicapped child

Does not apply \_\_\_\_\_

Developmentally Delayed \_\_\_\_\_

(a) Mild \_\_\_\_\_

(b) Moderate \_\_\_\_\_

(c) Severe \_\_\_\_\_

Mentally Retarded \_\_\_\_\_

(a) Mild \_\_\_\_\_

(b) Moderate \_\_\_\_\_

(c) Severe \_\_\_\_\_

Multihandicapped \_\_\_\_\_

Other \_\_\_\_\_

Describe \_\_\_\_\_

## 6. Source of diagnostic label

Does not apply \_\_\_\_\_

Medical \_\_\_\_\_

Mental Health \_\_\_\_\_

Guidance Center \_\_\_\_\_

School \_\_\_\_\_

Early Intervention Program \_\_\_\_\_

Other \_\_\_\_\_

Describe \_\_\_\_\_

## APPENDIX D:

### Consent Forms

UNIVERSITY OF OKLAHOMA  
AGREEMENT TO PARTICIPATE

Title of Project: Siblings of Handicapped Children: Their Attitudes and Level of Personal Adjustment as Related to Certain Characteristics of the Handicapped Child

Investigator Diana Mobley, Graduate Student  
Educational and Counseling Psychology  
College of Education  
(405) 325-5974.

I, \_\_\_\_\_, hereby agree to give my permission for my child to participate as a volunteer in the above named research project, which has been fully explained to me.

I understand that my child is free to refuse to answer any question at any time without prejudice to him/her. I further understand that I am free to withdraw my consent and to withdraw my child from the research project at any time without prejudice to me.

I understand that by agreeing for my child to participate in this research and signing this form I do not waive any of my legal rights.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent Signature



## UNIVERSITY OF OKLAHOMA

## AGREEMENT TO PARTICIPATE

Title of Project: Siblings of Handicapped Children: Their Attitudes and Level of Personal Adjustment as Related to Certain Characteristics of the Handicapped Child.

Investigator: Diana Mobley  
Educational and Counseling Psychology  
College of Education  
(405) 325-5974

I, \_\_\_\_\_, hereby agree to participate as a volunteer in the above named research project, which has been fully explained to me.

I understand that I am free to refuse to answer any question at any time. I further understand that I am free to withdraw my consent, and to withdraw from participation in the project at any time.

I understand that by agreeing to participate in this research and signing this form I do not give up any of my legal rights.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Participant