To the Graduate Council:

I am submitting herewith a dissertation written by Susan M. Flynn entitled "Psychological Adjustment and Family Experiences of Children in Foster Care Placed With or Apart From Siblings". I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Anne McIntyre, Ph.D., Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Associate Vice Chancellor
and Dean of the Graduate School

PSYCHOLOGICAL ADJUSTMENT AND FAMILY EXPERIENCES OF CHILDREN IN FOSTER CARE PLACED WITH OR APART FROM SIBLINGS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Susan M. Flynn

May, 1994

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DEDICATION

This dissertation is dedicated to three friends who helped me, each in their own way, to persevere through graduate school and the writing of this dissertation: Diane Martin, Ph.D., Susan Sobey Druffel, and Colonel Page A. Watson, Retired.

ACKNOWLEDGEMENTS

I wish to acknowledge the support and encouragement of my committee chair, Anne McIntyre, Ph.D., and the members of my committee, Richard Saudargas, Ph.D., Jo Lynn Cunningham, Ph.D., and Lance Laurence, Ph.D. Dr. McIntyre engaged me in research with children and taught me to think developmentally. I am grateful to Dr. McIntyre for her scholarship and standards, and her many kindnesses during my years at UT.

Millie Douglas, for whom the title of "research assistant" is a major understatement, was invaluable during this research. Millie made phone calls, arranged appointments, and navigated us all over Knox County. She helped with the data preparation and most of all, she was was very generous with her wit and insight.

The "Volunteer Certificates" which we gave to each child who participated in the study were designed and printed by my friend Tom Druffel, and I am grateful to him for helping this project so creatively.

Statistical expertise was provided by David Henry, Ph.D. His enthusiasm and advice are much appreciated.

I wish to acknowledge the large contribution of the Tennessee Department of Human Services in Region II-A,

particularly Kay McCampbell, District Director, Social Services and her staff for their assistance and direction. Many foster families and their children volunteered their time and interest for this study. It was a pleasure to meet them and spend time with them.

Finally, I must acknowledge the many friends who over the past six years have listened patiently to the progress of this endeavor while offering me kindness and encouragement. In particular, I wish to acknowledge my gratitude to my classmate, Barbara L. Taylor, who helped me appreciate the culture of Tennessee. She was a great companion through many lectures, exams, lunches, and various other adventures in learning. My friend Beth Allen Keathley has been most helpful as a sounding board throughout the dissertation process. Both of these women have enthusiasm, sensitivity, strong clinical skills and scholarship. I am honored to be their friend and proud to enter the profession with them.

ABSTRACT

It was hypothesized that foster children placed with a sibling would show better psychological adjustment and more embeddedness in the foster family than those foster children without such contacts. Subjects were 41 foster children between the ages of 6 and 12 years. Cognitive maturity, problem behaviors, psychosocial maturity, dependency, wariness, curiosity, and attention seeking were aspects of psychological adjustment. These were measured on the Peabody Picture Vocabulary Test-Revised, Child Behavior Checklist, Tasks of Emotional Development Test, Marble-in-the-Hole Game, and Picture Game. Embeddedness in the foster family was measured with a family sculpting technique. Family Boundary Ambiguity was measured with a questionnaire based on the research of Boss and Greenberg (1984).

Foster children placed with a natural sibling exhibited more curiosity, a healthy developmental trait, than those children placed apart. There were no group differences on the family measures. Foster children's perceptions of the structure of their foster families were confused, and did not correspond to the objective household. These responses suggested family is an

arbitrary unit to these children, reflecting physical presence in the home rather than psychological relationships. Implications for policy and theory were discussed.

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CHAPTER 1 INTRODUCTION

When families become dysfunctional and no longer able to care for their children, the children may enter the social services system and be placed in foster care. Foster care is a temporary solution with the stated goal of returning the children to their natural families. For psychological reunion to be possible, natural family attachments need to be continued while the child is in foster care, so contemporary foster care policy promotes visits with natural parents and with siblings living elsewhere, as well as placement with siblings when possible.

From a psychological perspective, the long-range family contact policy may have short-term implications for adjustment of the child while in foster care. The presence of familiar attachment figures such as natural parents and siblings may aid adjustment to the stresses and changes of the living environment (Freud & Dann, 1968; Schwarz & Wynn, 1971). On the other hand, continued contacts with natural family members may impede adjustment and adaptation in the new family. The child

may have divided loyalties and be less psychologically embedded in the foster family (Fanshel & Shinn, 1978).

There are, then, two areas of the foster care experience to be explored. The first is the psychological adjustment of the child in foster care. The second area is the child's experiences in the foster family, including the degree of embeddedness. Both are affected by contacts with the natural family. In both areas many researchers have relied on case records and surveys of caseworkers and foster parents to inform their findings. Only a few researchers have directly assessed the psychological development of foster children.

Psychological Adjustment

McIntyre and Keesler (1986) reported 48.7% of all foster children in a single catchment area manifested clinical psychological disorders on the narrow-band index of the Child Behavior Checklist (CBCL) (Achenbach & Edelbrock, 1983). In their commentary on these findings, McIntyre and Keesler strongly suggested foster care can no longer be viewed as only a temporary bridge between family disruptions but in many cases must become a therapeutic environment for the child.

In another study, foster children ages 4-8 years had an average score on the CBCL just below the clinical cutoff (Hulsey & White, 1989). They did not give the percentage of children who scored in the clinical range for comparison with results from McIntyre and Keesler (1986). Hulsey and White found that after controlling for differences in family structure, including family stability and number of siblings, foster children were rated about the same as non-foster children on the CBCL, suggesting that family factors put children at risk for psychopathology.

McIntyre, Lounsbury, Berntson, and Steel (1988) compared the responses of foster children with home-reared children on a picture projective technique. From the pattern of findings, the authors concluded foster children were not only more likely to believe life events are controlled externally but also were more likely to have an over-reliance on externality. A second interpretation of the findings was described as familial attachment, which showed a "lack of involvement" with family members. These two themes, external determination of experience and deficiencies in attachment, suggested foster children are at risk for psychopathology. The

authors recommended continuity of peer and sibling relationships as well as the more usually recommended continuity of caregivers.

One aspect of externality, the control of events, was also measured by McIntyre (1991) using the Nowicki-Strickland Locus of Control Scale for Children (Nowicki & Strickland, 1973). There were similar results, with external locus of control found more frequently among foster adolescents than among home-reared adolescents. The association of external attribution of control with other psychological and behavioral problems was noted as a factor that may make foster children more vulnerable to stress and psychopathology.

Foster children usually have a history of maltreatment and neglect which contributed to their psychological risk. Several psychological adjustment factors were examined in a study by Aber and Allen (1987) with maltreated and low socioeconomic level children. They discovered a factor they called <u>outer directedness</u> and described it as "problem solving relying on external cues" (p. 412), a definition with the flavor of externality. This factor underlies several measures of psychological development, namely, wariness and attention

seeking. A second factor of psychological development was found in this same study. This factor, secure readiness, was derived from measures of curiosity, cognitive maturity, variability, and dependency. Aber and Allen reported this factor represented a balance achieved by the child in which the child has established some secure and safe relationship and feels free enough to explore the world and learn. These characteristics and aspects of psychological development are pertinent to the population of foster children who have been found to be at risk for psychopathology.

Natural Parent Relationships

Natural family contacts, in general, have been studied in three ways: effects on reunion with the family, effects on duration of placements, and effects on the child's adjustment. Early termination of a placement sometimes is seen as an index of adjustment in that if a child cannot adjust and behaves disruptively in the foster family, the placement may well be terminated early.

Contacts with the natural family were found to be one significant factor in children's adaptation to foster care in the major study by Fanshel and Shinn (1978).

Case workers rated children who experienced frequent visits with their natural family as less embedded in foster care and more in conflict about their own identity than non-visited children, and they rated attachment to natural parents as about the same for both groups. Fanshel and Shinn thought the unvisited child tried to dispel the insult of abandonment, which is unbearable, by overvaluing the fantasy parents who no longer appeared. The physically absent family continued to have psychological presence. For those children who were visited, the contacts with the natural parents affected adjustment but also were important for after-care reunion. In fact, 86% of the children who were visited by natural parents eventually left foster care and returned to their natural families, whereas, in contrast, 57% of children left in care after 5 years had lost contact or been abandoned by their natural families.

In a more recent search for factors that might be related to duration of foster care, Milner (1987) reported that frequent high-quality visiting by the natural parents was associated with short-term foster placements. Milner suggested that policies that promote foster care as a short-term temporary solution need to be

supported by agency actions that promote natural family visits.

Additional evidence for the importance of parental visits was offered by Marcus (1990), who interviewed foster children of average age of 12 years about their social supports and coping strategies. Marcus found that visits by natural parents were positively associated with a child's perception of control over the attitudes of both friends and parents.

Some birth parents may not be able to visit their children in care because of illness, imprisonment, or poverty. Others may find it too difficult to arrange within the system. Littner (1975) wrote about the difficulties natural parents can present to foster parents. They can be argumentative, uncooperative, late, or drunk. They can have severe emotional problems and be upsetting to the child. Yet despite these problems Littner concluded that the natural parents are very important to the child. Without visits, the child may develop unrealistic pictures of the parents, either overidealizing them or exaggerating their problems. According to Littner, the child never really understands why the natural parents have left him or her, and the

child deeply misses the parents. Visits with the natural parents help the child to develop realistic pictures of the parents and stay connected to the family roots "no matter how deformed they may be" (p. 179). Littner acknowledged that these visits may upset the child, which in turn may distress the foster parents, but he believed there is a developmental benefit in making the grief manifest and helping the child mourn the loss and separation.

Natural family contacts are one factor in the overall policy of reuniting foster children with their natural parents. In several studies it has been shown that there is psychological importance in natural family contacts. But the reality for foster children is less benign. A review of case records by Poulin (192) found that 42% of the children in a sample of 100 had not been visited by any relative in over a year. Mech (1985) reported on the results of social services to 1,559 children in a national sample survey. Mech discovered that nearly 50% of the children were unvisited during the 3-month period of the study. The average time in care was 39 months. Those children who received no parental visits had a mean placement time of 50 months. Mech

emphasized that despite evidence and policies on the value of parental visits, about half of the children in care were not visited by their natural parents.

Sibling Relationships

Authors of the preceding studies did not specifically mention visits with siblings. Such visits, however, can be an important part of birth family contacts. Sibling contacts may also take the more powerful form of being placed together in the same foster home. The presence of a natural sibling may be helpful in the adjustment to a new environment. According to the pioneering work of Freud and Dann (1968), psychological sibling relationships among war orphans helped in their survival and development. Those children had either lost their parents or never knew them, and the other children in their group functioned as important and steadying influences. Their good influence may in part have been a function of their familiarity. Schwarz and Wynn (1971) found that the less experience the child had with novel situations, the more distressed the child became at separation from mother. This suggests that if a familiar figure remains with a child, the situation is less novel, and the child may feel less distressed.

Gold (1989) studied sibling relationships across the life span and reported that siblings do offer support for one another. Such support can be emotional as well as instrumental, but both require some degree of psychological involvement with the other. For a sibling to be useful to a child in care, either as a source of emotional support or instrumental support, there must be a psychological connection with the sibling, and that is not always the case, particularly when the original family has been disrupted.

Timberlake and Hamlin (1982) reported that when children are separated from siblings, they feel they have lost a part of themselves, which compounds the loss, grief, and depression experienced by foster children. Hegar, in a 1988 survey of sibling relationships, agreed with Timberlake and Hamlin. She also noted how little research was available on siblings and sibling separations. And she described how adults who had grown up in foster care separated from siblings would have liked to have seen their siblings more often or even stayed with them.

The risk of disruption of placements has been the focus of some research into the role of siblings in

foster care. Termination rates for sibling placements were examined by Staff and Fein (1992), Boer and Spiering (1991), and Aldridge and Cautley (1976). In all of these studies data from case records, caseworkers, or foster parents were used. About two-thirds of the children placed together stayed together and more stayed in their original placement than children placed alone (Staff & Fein, 1992). Placements were terminated early because of disruptive behavior and when the foster parents had a child of their own who was close in age to the foster child, a condition found in single placements as well as sibling placements (Boer & Spiering, 1991). Aldridge and Cautley (1976) found foster parents about evenly split on whether or not siblings helped with adjustment to care. They found that social workers thought siblings helped.

In the only study of the risks or benefits of siblings to adjustment in care in which foster children were directly assessed, children in foster homes with a natural sibling were rated as having fewer problem behaviors than children placed without their siblings (Flynn, 1991). Flynn concluded from these results that coplacements of siblings were beneficial or at least not harmful.

Experiences in Foster Care

What has not been measured is how the foster children themselves view their siblings and families. Policy makers and researchers who presume some traditional family and sibling history may be ignoring the harsher experiences of childhood for foster children. Although families are the usual ground where children form sibling relationships, when the birth family has been dysfunctional and temporarily disbanded, a child might be confused about who is a birth sibling. The confusion may be increased within the foster family where a child lives with other foster children, natural children of the foster parents, and with their own birth siblings.

A child in foster care also has two families, although the original one may be denied and rejected if the child suffered abuse and neglect. And, as we know from Fanshel and Shinn (1978), the child may remain loyal to the original family and not feel part of the foster family. Furthermore, it seems probable that children who have spent time in a family that is deteriorating on some level might be confused about the nature of a family, the family they have left, and the family in

which they are now living. The children are not the only ones who are confused about the structure of foster families.

Within the social service system a foster family is viewed as bounded and intact, a safe container for a child who has lost the safety of his or her original family structure. However, as Kufeldt and Allison (1990) pointed out, foster families are different from non-foster families because the foster parents are employees of the social service agency. This alone creates a more fluid boundary than within a non-foster family. Eastman (1979) said viewing a foster family as a traditional nuclear family system denies the reality that most foster parents face. The foster child arrives often abruptly and always with a case worker. Foster parents are responsible to the external agency and often view the agency as the "ultimate parental authority figure" (p. 565). Foster families are open systems, argued Eastman, and recognizing their need to be adaptable but also stable may help both agencies and families. Kufeldt and Allison (1990) also noted that the expectation that a foster family fits a standard nuclear model causes the system to limit contacts with the birth family, and this

in turn raises a barrier to reunion of the child with that family.

These papers on foster families are not research based. However, family structure and experiences are important issues for the foster children themselves, who have the unique situation of two families, even if one has disappeared temporarily.

Research Techniques for Families

Techniques have been devised to measure family structures, family closeness, and family boundaries. A method called family sculpting has been used in family therapy to concretize the structure and dynamics of the family. Results have suggested that "people are able to give a spatial representation of important interpersonal relationships" (Eckblad & Vandvik, 1992, p. 85). However, only a few of these methods have been researched.

One such technique is the Family Relations Test used by Lockwood and Frost (1973) in a study with 11-year-old boys who had been referred for school problems. The purpose of the study was to determine the preferred family member of these boys. The Family Relations Test purportedly measures the psychological importance of a

family member to a child. Various statements, both positive and negative, are given to the child who then puts them in a mailbox for the appropriate family member or in the box marked "Nobody". The family member who receives the most items is considered the most important psychologically to the child. The 11-year-old boys in this study attributed more items to their siblings than to any other family member, demonstrating in a tangible way that siblings were important for these children.

Another measurement strategy, the Kvebaek Family Sculpture Technique, has been found to differentiate between normal families and families in which the children have "various kinds of physical or psychosocial problems" (Eckblad & Vandvik, 1992, p. 85). One or more family members are asked to place figurines representing family members on a piece of white paper in a manner to represent family relationships. Physical distances between all the figures are measured and averaged and then interpreted as "an index of experienced psychological distance (closeness, belongingness, cohesion and so on)" (p. 86). Families can be visualized and scored as close when average distance is small and skewed when the variability of the distance is large. A

second dimension, hierarchic, is scored visually based on placement of the parental figurines above the child figures. In one study a small sample of families was found to vary along these dimensions, and the families also differed on a number of variables such as chronic difficulties, psychosocial functioning of an invalid child, and the childhood environment of the mother. Variances among the families were not related to the ages of the children or their CBCL scores (Eckblad & Vandvik, 1992).

In the only identified study of a family sculpting technique used with foster families, Lemieux (1984) adapted a spatial instrument from the field of art therapy to measure amount of contact and closeness of foster family members. New foster parents and their biological children were asked to complete the measures before receiving a foster child and again after six months. Distances at which family members were placed from the target individual were ranked, and the ranks from the two administrations were compared. Lemieux reported a number of impressions: Parents and children reported less contact with each other after the arrival of the foster child, and the degree of intimacy also was

reduced. Lemieux was impressed by the fact that foster mothers "almost always included foster children" within the family structure but fathers did so "less often" (p. 79), suggesting confusion or at least a difference in perception of family structure.

Another approach to measuring family structure and experience is that developed by Boss, Greenberg, and Pearce-McCall (1990). They have researched the boundaries of family systems with such diverse populations as divorced women, families of military personnel missing in action, parents of adolescents leaving home, and caregivers of patients with dementia. Boss defined the term family boundary ambiguity as "a state in which family members are uncertain in their perceptions about who is in or out of the family and who is performing what roles and tasks within the family system" (Boss & Greenberg, 1984, p. 536). Boss theorized ambiguity could impede family reorganization and allow stress to continue. The ambiguity can result from lack of external information or denial within the family. Boss and Greenberg cautioned that families decide who is in and who is out, despite what outsiders might actually perceive. Boss and Greenberg operationalized boundary

ambiguity with the indicator "of psychological presence in families" of some family member who is "physically absent" (Boss & Greenberg, 1984, p. 536). The technique of measuring ambiguity consists of a questionnaire with 14 to 25 items and a Likert-type scale. The items are tailored to the population being studied and directly refer to cognitions and affects about the missing family member to assess the psychological presence of that family member.

In summary, these four strategies for family research involve two spatial techniques, an attribution task, and a questionnaire about the subject's experience of a missing family member. None have been used with foster children although family structures and experiences are very important for these children. Foster children may experience the psychological presence of their absent natural parents and siblings. Confusion about family structures and boundaries may affect the psychological adjustment of foster children as well as their family relationships. Foster children may feel conflictual ties of loyalty to the natural family and not become embedded in the foster family, as Fanshel and Shinn observed (1978). Research is needed to investigate

how foster children perceive their family structures, their siblings, and themselves within their families. It is also important to examine in more detail the functioning of sibling presence and to evaluate characteristics thought to promote as well as represent good psychological adjustment in childhood.

Brief Overview of the Design of Current Study

The current study was designed to assess the foster children's experiences of family and the children's psychological adjustment. In particular, it was designed to assess if natural family images and thoughts are related to psychological adjustment, if natural parent visits and companion siblings are related to psychological adjustment, and the foster children's sense of embeddedness in foster family and in their natural family.

The foster child was the subject for all the measures. Several techniques were adapted from studies mentioned previously. First, the technique of measuring family boundary ambiguity devised by Boss, Greenberg, and Pearce-McCall (1990) was adapted for the present study. Assessing the reliability and validity of the resulting

Family Boundary Ambiguity Scale for Foster Children was a goal of this study.

The spatial technique of Lemieux (1984) was also adapted for this study to directly measure the perceptions foster children have about the structures of their foster families and their birth families. This measure, called here the Foster Family Circle and the Original Family Circle, was scored with a distance measure to provide an index of embeddedness (in the parlance of Fanshel & Shinn, 1978; referred to as belongingness by Eckblad & Vandvik, 1992).

Cognitive maturity, psychosocial maturity, problem behaviors, wariness, dependency, curiosity, and verbal interactions, all measures of psychological adjustment used in research with foster children and maltreated children, were used here.

The hypothesis for this study was that the presence of a biological sibling in the foster home is related to better psychological adjustment during foster care and to better psychological embeddedness with the foster family.

The primary independent variable in this study was the placement with a natural sibling or placement apart

from a natural sibling. Visits with natural parents were also considered because natural family contacts demonstrated relationship with foster family experiences. The control variables were age, race, and gender. The dependent variables were the measures of psychological adjustment of the child and the measures of family experience.

CHAPTER 2 METHOD

Subjects

The subjects were foster children from Knox County, Tennessee, who were between the ages of 6 and 12 years and who had been in their current foster homes at least 3 months. Records from the Department of Human Services were used to identify foster children who had been placed with a natural sibling (the WITH group in this study) and those children who had been placed apart from their siblings (the APART group in this study).

Sixty-six children were identified from agency records as being in the desired age bracket and living in private foster homes, but not all 66 became subjects in this study. Eight children had been transferred out of jurisdiction, 1 had been adopted, 4 were handicapped so severely they could not participate, leaving 53 possible subjects. Eight children could not be assessed because their foster parents refused to schedule an appointment. Forty-five children were actually screened and only one refused to volunteer for the research tests and games. Of the 44 volunteers, 3 turned out to be only children and were dropped from this study, leaving 41 subjects.

The sample had 21 girls and 20 boys ranging in age from 5 years 11 months to 12 years 4 months. Eight of the boys (40%) were African-American, and 12 were White. The sample had 14 White girls and 7 African-American girls. The scores on the Peabody Picture Vocabulary Test-Revised (PPVT-R) ranged from 54 to 112, that is, from the mental retardation to the high average range of scores. The average IQ score was 84.9 (SD = 15.97).

There were 13 children placed apart from a birth sibling (the APART group) and 28 placed with a birth sibling in the foster home (the WITH group). The composition of these two groups was evaluated statistically for any differences in gender, race, age, or verbal intelligence that might affect further statistical analysis. Chi-square results for gender were not significant (X^2 (1, N = 41) = 1.24, p = .26). Chi-square results for race were not significant (X^2(1, N = 41) = 0.029, p = .87). A t test for age differences was not significant (t (39) = -0.69, p = .50). There was no significant difference in verbal intelligence between the groups (t (39) = -0.78, p = .44). These four results showed the two groups were equivalent in composition by gender, race, age, and verbal intelligence.

There were a number of experiential variables pertinent to foster children and important for describing this particular sample. The information on these is presented in Table 1 for the entire sample and the two placement groups. Months in foster care, months spent with the birth family, and number of placements were obtained from agency records. The only experiential variable on which the two placement groups differed was the number of children in the foster home. The WITH group of children was found to have more children in their foster homes than the APART group (respectively, M = 3.9, SD = 1.56; M = 2.7, SD = 1.25), t (39) = -2.5006, p <.02).

Seven of the siblings of the children in the WITH group were also subjects in this study. To investigate if these seven pairs were unduly influencing the outcomes, another sample was created by randomly dropping one subject from each pair and repeating the analyses. Results were sufficiently close to the original findings to conclude that the observations did not deviate from the criterion of independence.

TABLE 1
Placement Details

	APART n=13	WITH n=28	SAMPLE N=41
Months in Foster Care			
M	53.3	47.9	49.6
SD	26.58	24.15	24.74
Min/Max	21-110	12-105	12-110
Months in Birth Family			
M	49.1	60.6	56.9
SD	26.54	25.67	26.18
Min/Max	0-91	16-126	0-126
Number of Placements			
M	2.7	2.4	2.5
SD	1.79	1.39	1.52
Min/Max	1-7	1-6	1-7
Number of Children in Foster Home*			
M	2.7	3.9	3.5
SD	1.25	1.56	1.57
Min/Max	1-5	2-7	1-7

*t (39) = -2.5006, p <.02.

The WITH group of subjects (n = 28) ostensibly contained children who were placed with a birth sibling versus those who were separated from a sibling (the APART group, n = 13). However, 23 of the 28 children placed with a sibling also had a sibling they were separated from. This phenomenon was explored by removing these 23 subjects from the WITH group (leaving n = 5), putting them into a third group (BOTH, n = 23), and repeating the analyses. Unlike the original two groups, these three groups differed significantly by race and age. Fisher's Exact Test showed this smaller WITH group, which had only 5 African-American members, was significantly different from the other two groups in racial composition (p = .003). Age differences were explored with analysis of variance (ANOVA), and the post-hoc Scheffe test showed the mean age of the WITH group (M = 134.0 months, SD = 15.84) was significantly older than either the APART (M = 101.5, SD = 19.68) and the BOTH group (M = 100.7, SD = 20.48).

Consideration was given to using these three groups of subjects. However, the age and race differences were problematic, especially with the very small size of the WITH group (n = 5). This study was designed with two

groups, and it was decided to follow through with that plan. In future research, however, these three categories of sibling separation should be examined.

Procedures

Recruitment. The agency responsible for foster children has a policy of reviewing the adjustment of each child 60 days after entry into care and then on each annual anniversary after that. The assessments in this study were part of the agency reviews from May through August, 1992. Screenings were scheduled by phone call, and in the course of the call the foster parent was invited to take part in this research project. Both foster parents and children were recruited as volunteers. Each child who participated was awarded a certificate inscribed with his or her name as a volunteer.

Data Collection. The foster parents were invited to bring the child to the university for the research experience, but if they could not do that, the researcher and assistant went to the foster home. Only 3 foster parents and their 5 participating foster children actually came to the university. All other screenings and volunteer testings were done in the foster homes under a variety of conditions. The assistant

administered the Child Behavior Checklist (CBCL) and Family Contact Questionnaire to the foster parents, and the principal investigator worked with the children. Past research experience had shown that it was best for the CBCL to be done out of earshot of the child, so in most homes the foster parent and research assistant worked in the kitchen while the primary investigator worked with the child in the living room, usually on the sofa. The marble game usually was played on the living room floor. Each child first was given the verbal IQ measure as part of the regular screening for foster children and then asked to volunteer for each of the following tests: marble game, picture game, family circles, picture projective, and family boundary questionnaire.

Measures

1. Cognitive Maturity. The Peabody Picture Vocabulary Test-Revised (PPVT-R) was administered to each child as a measure of cognitive maturity. The age-standardized score correlates well with the Full Scale IQ as measured by the WISC-R (r = .70) (Dunn & Dunn, 1980), and this standardized score was employed in this study.

2. Problem Behaviors. The Child Behavior Checklist

(CBCL) (Achenbach & Edelbrock, 1983) is an alphabetical list of 113 manifest problem behaviors. Children may be ranked as doing the behavior frequently, sometimes, or never, and the responses are scored 2, 1, and 0, respectively. T-scores for those behaviors deemed to be external and those behaviors listed as internal are obtained. A summary T-score also is calculated. All T-scores are age and gender normed. The summary T-score was used in this study as a behavioral measure of adjustment.

3. Psychosocial Maturity. The test of psychosocial maturity was performance on the Tasks of Emotional Development (TED). The TED (Cohen & Weil, 1971) is a projective test of 13 pictures of children doing everyday things such as homework, playing, and fighting. Each picture was designed to capture an Eriksonian milestone of psychosocial development such as Trust, or Industry.

In research, the pictures typically are scored by giving 1 point for recognition of the milestone in the picture and 1 point for describing the theoretically mature outcome. In this study the data from the outcome scores were not as reliable as anticipated, so only the recognition scores were used. Interrater reliability

between the two scorers was then 100%. Cohen and Weil (1971) have shown scores on this test differentiated between maladjusted and adjusted children.

Two children refused to do any of the TED. One other child had such a speech impediment that the task was not administered to her. Of the other 38 subjects, 29 attempted all 13 cards, but 9 stopped early. Three of the nine who stopped early attempted less than half of the 13 cards. Because of this disparity, the primary score for the TED was calculated as the ratio of the number of cards recognized to the number of cards attempted.

4. Dependency. The measure of Dependency was derived from performance on the Marble-in-the-Hole game (Zigler, 1961). The child is shown a box with two holes in the top and two bags of marbles in two different colors. The instructions are to drop the red marbles in one hole and the blue ones in the other hole. Ten minutes is allotted, but the child may stop at any time. The time is noted as T1. The game is repeated and the time noted as T2. During both trials the examiner is encouraging to the child. The task is "tedious and monotonous and makes the subject's motivation to interact

with the adult the dominant factor in determining performance" (Zigler, 1961). Total time played is thus seen as responsiveness to social reinforcement from the examiner, or dependency. Validity for this measure of Dependency was provided by Zigler (1961), who found it differentiated between two groups of retarded children.

5. Wariness. The marble game also provides a measure of Wariness. Children who are wary and distrusting are thought to use Trial 1 to ensure the game is safe and then to play Trial 2 for the social reinforcement. A more secure child will be less wary and will be satiated by playing longer on the first trial. The measure of Wariness is T2 minus T1. To avoid a negative number, the score was adjusted by adding the most negative score to all the scores. Construct validity for this attribute was demonstrated by Alexander, Huganir, and Zigler (1985), who found that retarded children had higher levels of wariness than nonretarded children.

6. Curiosity. The child is shown, one at a time, 21 pages in a binder-style notebook. On the top of each page is a picture (e.g., a dog), and below, left and right, are two doors. Behind one door (always on the

left side) is a picture identical to that on the top of the page. Behind the other door (on the right side) is a different picture (e.g., a cat). The first page is a sample page: The child is instructed to open the door on the left and observe that the picture is identical and then to open the door on the right and observe that the picture is different (novel). For the remaining 20 pages the child is asked to open only one door. The score is the number of novel pictures chosen by the child, with the maximum being 20. The higher the score, the more exploration the child has engaged in, and the more curious he or she is thought to be. The construct validity of this measure was shown by Harter and Zigler (1974).

7. Verbal Interactions. Verbalizations the children make to the researcher are conceptualized by Aber and Allen (1987) as attention-seeking behavior and related to adjustment. While the children were selecting the pictures, their comments were recorded to measure attention-seeking behavior. The tapes were transcribed and scored. Initially the scoring had been planned as follows: 3 points for each verbal request for something other than information (e.g., "I want some food"), 2

points for a simple question (e.g., "Do you go to school here?"), 1 point for a simple declarative statement (e.g., "I like this game"), and 0.5 point for each egocentric comment (e.g., "I'm really good at this"). However, two scorers found it difficult to distinguish the egocentric comments from the simple declarative statements, and the scoring was simplified by dropping the category of egocentric statements and by scoring any non-question as a simple declarative statement. Inter-rater reliability was then 100%.

8. Foster Family Embeddedness. The Foster Family Circle technique, adapted from Lemieux (1984), was used as a medium for generating a measure of Embeddedness. The child is shown a circle about 4 inches in diameter with a dot in the center (see Appendix). The child is instructed to imagine himself or herself at the center dot and then to add one dot for each foster family member within the circle. The child is told the dots may be placed close to their dot if they spend a lot of time with the person or really like the person, or they may place the dots farther away from their center dot. For this study, an average distance score (sum of the distances of the dots from the center divided by the

number of dots) was calculated to quantify the degree of closeness or embeddedness the child experienced in the foster family. This embeddedness measure has face validity. Construct validity was a question explored in this study and is reported in the results section. The Foster Family Circle was completed by all subjects, but one test turned out to be unscorable because the child insisted on drawing shapes of each family member rather than placing the dots.

9. Original Family Embeddedness. This is measured with the same circle and dot as in the Foster Family Circle, but here the child is instructed to consider his original (birth) family. Scoring is the same as for the Foster Family Circle. Construct validity was explored in this study and is reported in the results section. The Original Family Circle was refused by six children.

10. Family Boundary Ambiguity. A new measure of five questions modelled on the research of Boss, Greenberg, and Pearce-McCall (1990) was developed. (A copy of the questionnaire is in the Appendix.) These questions are thought to measure the discrepancy between physical presence and psychological presence of family members. Responses are scored on a 5-point scale (1 =

never, 2 = rarely, 3 = sometimes, 4 = often, 5 = almost always). The higher the score, the more the child "perceives his or her family boundary as ambiguous" (Boss, Greenberg, & Pearce-McCall, 1990, p. 23). Internal consistency of the items, measured by Cronbach's alpha, was +0.56. Construct validity was investigated in this study and is reported in the results section. The questionnaire was refused by 6 children.

11. Parent Visits. Because of the possibility that natural family visits would be related to perceptions of embeddedness, the frequency and regularity of natural parent visits were assessed. Foster parents or caseworkers estimated the frequency of visits with natural parents in the preceding 12 months on a 6-point scale (0 = never, 1 = one to three times, 2 = four to six times, 3 = about once a month, 4 = about twice a month, and 5 = more than twice a month).

12. Quality of Visits. Quality of Visits could also be related to the perception of embeddedness. Therefore, this was measured. Quality of visits was a judgement made by the foster parents about effects of the visits with the natural parents on the foster children. Ratings (1 = negative, 0 = positive) were given for 26 children.

CHAPTER 3 RESULTS

The distributions of scores on the dependent variables were examined for departures from normality that would require the use of nonparametric statistics. None of the dependent variables showed substantial departure from normality according to Lehman's criteria (1991) and generally accepted practices (D. Henry, personal communication, January 3, 1994). Parametric statistics were then used for data analyses.

Group Differences in Adjustment

The means on the adjustment variables for the two groups that were expected to show differences are presented in Table 2. On five of the variables, Cognitive Maturity, Problem Behaviors, Psychosocial Maturity, Curiosity, and Dependency, differences were found in the directions expected from the Hypothesis. However, only the difference on Curiosity was significant. The children placed with a sibling exhibited more Curiosity than those placed apart (t (39) = -1.88, $p < .035$, one-tailed).

Children in the WITH group also engaged in significantly more Verbal Interactions than children in

TABLE 2
Means on Dependent Variables for Two Sibling Groups

Variable	----APART---- M	SD	------WITH---- M	SD	df	t	p
INDIVIDUAL ADJUSTMENT							
Cog Maturity	82.0	16.18	86.2	15.99	39	-0.78	.44
Behaviors	64.9	13.11	58.5	11.36	39	1.59	.12
Psy Maturity	0.5	0.29	0.6	0.24	39	-0.76	.45
Dependency	748.4	395.75	640.4	332.97	39	0.91	.36
Wariness	341.5	178.46	381.1	167.15	39	-0.69	.49
Curiosity	6.0	5.64	9.8	6.08	39	-1.88	.04*
Verbal Act	6.7	6.59	12.3	9.30	39	-1.95	.03*
FAMILY EXPERIENCE							
Embedded	0.66	0.28	0.60	0.48	38	0.47	.64
FF Error	2.9	3.57	2.6	3.46	38	0.28	.78
Ambiguity	13.4	4.28	15.9	4.64	33	-1.43	.16

* 1-tailed.

the APART group, t (39) = -1.95, $p < .03$, one-tailed. However, Verbal Interaction was correlated with Number of Children r (41)= +.34, $p = .03$, the only experiential variable that differed significantly between the two groups. In order to determine whether the association of Number of Children with group status (WITH or APART), accounted for the differences found in Verbal Interaction, analysis of covariance was run. When the effect of the covariate, Number of Children, was controlled, no main effect for group membership was found.

As described earlier, some children in the WITH group also had a sibling they were separated from, that is, they had another sibling not living in their foster home. This group of 23 children had been classified as BOTH (in contrast to WITH and APART), and there were several demographic differences among the three sibling groups. Differences among these three groups on the adjustment variables were explored, and the WITH group was found to show fewer problem behaviors (M = 47.0, SD = 9.62) than either the APART group (M = 64.9, SD = 13.11) or the BOTH group (M = 61.0, SD = 10.25). The three groups also had been found to differ on race,

age, and Number of Children. Analyses of covariance comparing the three groups on Problem Behaviors and using race, age, and Number of Children (separately) as covariates were conducted. In each case, when the effect of the demographic covariate on Problem Behaviors was controlled, no main effect for group status was found suggesting that the apparent group differences on Problem Behaviors were an artifact of the control variables.

To determine if there was a difference between the sibling groups on staying with the TED, a classification variable was created by putting the subjects who responded to more than half of the TED cards into one group and those who stopped before the halfway point into a second group. According to Fisher's Exact Test the two sibling groups did not differ in the number of cards attempted.

Chi-square analysis was used to determine that the number of children who scored in the clinical range on the CBCL SUM-T was not different between the two groups. In the APART group, 53.8% of the children scored above the clinical cutoff of the 90th percentile. In the WITH group, 35.7% of the children scored above the clinical cutoff. On the whole sample, 17 of 41 children (41.6)

had total problem behaviors that scored in the clinical range.

Discriminant analyses were used to discover if a pattern of variables was a good discriminator between the two groups. The model was constructed of the nine continuous dependent variables. The variables were entered in order by F statistic value. The discriminant function included only one variable, Curiosity, paralleling the finding with the univariate test. This measure was the first and only variable that was entered. F (1, 31) = 3.013, p = .09. This dependent variable, Curiosity, explained about 8% of the variance in the model (average squared canonical correlation = 0.086) and was the best (and only) discriminator between the two groups.

Discriminant function analysis was also run to explore how the variables taken as a whole discriminated between these two groups of subjects. The SAS procedure DISCRIM was a parametric discriminant function analysis using the pooled variance of the 8 continuous dependent variables that had equivalent variances between the two groups (Embeddedness had unequal variances and was not included). This model resulted in 8 observations being

wrongly classified into the opposite group, a posterior probability error rate of 0.27. This seemed to be the best model for discriminating between the two groups.

Family Experience

Examination of the 40 completed Foster Family Circles showed that more than half (22) of the children had made errors on the objective composition of the foster families. Both errors of commission and omission were made by the children. Two children added 10 extra people to the family, and one child added 8 and left out 2. To capture these unexpected data, a new variable was created by summing the errors into one error score (Foster Family Error), which represented these deviations from the objective household. These errors, of course, affected the accuracy of the average distance score used here as the measure of embeddedness. The total distance (the numerator) was distorted, as was the number of the dots (the denominator). However, the averages as calculated represented the data, and they were accepted for this study. The minimum average distance was 0.06 inches, and the maximum was 1.95 inches. The minimum score was from a circle with 7 dots and 1 error, and the maximum score was from a circle with 7 dots and no error.

Just as the Foster Family Circle required scoring adjustments, so did the Original Family Circle. The actual compositions of many of the children's original families were unknown except for the siblings. Therefore, instead of using the dots to measure embeddedness, only the accuracy of the birth siblings was used in a new variable called Original Family Sibling Error. Twenty-one of the subjects made errors on their birth siblings, either adding names to the circle or omitting them. These errors were scored as 1 on the Original Family Sibling Error. During the scoring it was discovered that 12 subjects had omitted their companion sibling (birth sibling placed with the child) from their original family circle. Another new variable was created for these data. This variable, labelled Original Family Sibling Omitted, also was scored 1 for an error, 0 if no error. These errors on both family circles were a surprising finding. However, there were no significant differences found between the two groups for the errors on either Family Circle. About half of each placement group made errors on the Original Family Circle and about half of each placement group made errors on the Foster Family Circle.

The means and standard deviations for the other family experience variables are presented in Table 2. The WITH group showed more Embeddedness and fewer errors on the Foster Family Circle as predicted from the hypothesis, but the differences were not significant. Ambiguity for the WITH group was also higher than for the APART group but was not significant.

Quality of Visits was a judgement made by the foster parents about the effects of visits with the natural parents on the children. Twenty-six children were rated. Nine were in the APART group, and 3 of these were judged to be negatively affected. In the WITH group, 8 of the 17 ratings were negative. Chi-square analysis showed the two groups did not differ on this indirect measure of family experience.

Correlations among Dependent Variables

Relationships among the adjustment dependent variables were evaluated. In their study of maltreated and non-maltreated home-reared children, Aber and Allen (1987) found Curiosity, Cognitive Maturity, and low Dependency clustered together on one factor which discriminated between the two groups of children. They also found Verbal Interaction and Wariness were part of a

second factor. Correlations of these variables among the foster children are shown in Table 3. Curiosity was found to have a significant negative correlation with Dependency, a finding in line with Aber and Allen's (1987) discussion of these constructs. Contrary to Aber and Allen's findings, among the foster children, Curiosity and Cognitive Maturity were significantly and positively correlated with Verbal Interactions. There

TABLE 3
Correlations among Dependent Variables[a]

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Psy Mat[b]	-										
2. Behavior	-.40*	-									
3. Curiosity	.23	-.42*	-								
4. Verbal Act.	.16	-.28	.46*	-							
5. Dependcy	-.09	.20	-.46*	-.15	-						
6. Wariness	-.04	-.19	-.09	-.01	.10	-					
7. Embedded[c]	-.21	.19	-.28	-.08	-.01	.28	-				
8. FF Error[c]	.10	.15	-.29	-.28	.16	-.10	-.03	-			
9. Ambguity[d]	.10	-.14	.09	-.26	.15	-.06	-.18	.28	-		
10. OF Error[d]	.05	.17	-.12	.00	-.16	-.31	.10	-.14	-.17	-	
11. Sib Err[d]	-.07	.29	-.26	-.10	-.09	-.09	.02	.06	-.08	.59*	-
12. Cog Mat	.03	-.13	.24	.31*	-.22	-.16	-.27	.06	.04	.30	.12

* $P < .05$.
[a] $n = 41$. [b] $n = 38$. [c] $n = 40$. [d] $n = 35$.

were no other significant relationships among the variables Aber and Allen studied. The CBCL score for problem behaviors, perhaps the most explicit measure of individual (mal)adjustment, was related in the expected negative direction with both Psychosocial Maturity and Curiosity.

Among the variables specific to family experience, only two were related. Inaccuracy on natural family siblings and inaccuracy on companion siblings showed a positive association.

Other Findings

Several correlations of interest between the foster experience variables and the dependent variables are shown in Table 4. Psychosocial Maturity was inversely related to number of placements. Length of time in foster care was related positively to Problem Behaviors. Behaviors also improved with age. Behaviors were negatively associated with the number of children in the home. Two other dependent variables were related to age: Curiosity increased with age, and Dependency decreased with age. Wariness was positively associated with race, with White children more wary than the African-American children. The more time the children had spent with

TABLE 4
Correlations among Dependent, Experiential, and Demographic Variables[a]

	Parent Visits	Mos Care	No. Place	Mos Orig	No. Chld	Race	Age
Psy Mat[b]			-.32*				
Behavior		-.36*			-.45*		-.38*
Curiosity							.42*
Verbal Act					.34*		
Dedendncy							-.36*
Wariness						.32*	
Ambiguity[c]	.41*						
●F Error[c]				-.53*			-.50*
Sib Err[c]							-.52*

*p < .05.
[a]N = 41. [b]n = 38. [c]n = 35.

original families, and the older the children were, the fewer errors they made on the Original Family Circle. Older children were less likely to omit their companion sibling from the Original Family Circle.

Table 5 shows correlations among the experiential and demographic variables. The more parent visits there were, the more negatively the quality of visits were rated. Length of time in foster care was related to the number of parent visits, corroborating what Fanshel and Shinn (1978), Milner (1987), and Mech (1985) reported. Number of parent visits was positively related to the length of time a child had been with the natural family.

TABLE 5
Correlations among Experiential and Demographic Variables

Variables	1	2	3	4	5	6
1. Parent Visits	-					
2. Quality Visits	-.41*	-				
3. Mos in Care	-.30*	- 21	-			
4. Number Placemnt	.15	.04	.05	-		
5. Mos in Original	.36*	.52*	-.60	.03	-	
6. Number Children	-.00	.30	.08	.06	.18	-
7. Race	-.30	.09	-.09	.03	-.19	-.39*
8. Age	.12	-.63*	.35*	.01	.50*	.28

* $p < .05$

It is worth noting that foster parents rated the visits of the natural parents as being more negative for the children who had been in their original families for a longer period of time, and for older children. There were likely to be a smaller Number of Children in the foster home when the child was White.

Findings for the Exploration of Validity

In this study a number of new measures were used to explore the child's perceptions of the experiences in their foster families and original families. There were no significant correlations among Ambiguity, Embeddednes, errors on the Foster Family Circle, or errors on the Original Family Circle. However, Ambiguity, measured on the Family Boundary Questionnaire, showed a significant positive correlation (r (35) = .41, p = .02) with the

number of parent visits, supporting the belief that this scale is appropriate for foster children.

CHAPTER 4 DISCUSSION

Individual Adjustment

The first hypothesis of this study was that foster children placed with a biological sibling would show better psychological adjustment than foster children placed apart from their siblings. This hypothesis was borne out on one measure of psychological adjustment, curiosity. The companioned group could be distinguished from the separated group on the basis of their greater interest in novel stimuli. This shows the children placed with their siblings had a psychological strength, curiosity, that their separated peers did not.

Curiosity is a psychological strength because it enables the child to explore the world, to learn, to succeed in school, and to be in position to develop mastery. It is part of the motivational equipment necessary for learning and for mastery during latency. Harter (1981) saw curiosity as part of motivation and defined it as interest in learning for its own sake. She found that curiosity decreased with age, being highest in third grade and continuing to decline into the ninth grade. She attributed this to conforming to school

expectations that stifled a child's natural curiosity. In the current study, curiosity was greater for older children, which is what might be expected from the Eriksonian perspective. This model postulates that as the child develops a sense of trust and security in the world, the child will be able to explore the world (Erikson, 1963). Exploratory behavior and development are also closely linked in attachment research. Researchers have reported that infants who were judged to be securely attached to their mothers exhibited more exploratory behavior than those infants rated as insecurely attached (Ainsworth, Blehar, Waters, & Wall, 1978). For the secure child, the mother acts as a base of operations from which the child can move out into the world and explore, with periodic returns for comfort or reassurance. A child who is anxious and insecure does not have the psychic energy available to explore the world but is forced instead to use his or her energy checking on the caregiver's continued presence. In this study the children with their siblings showed more curiosity. The companion sibling in the foster home may have functioned as a familiar attachment figure, filling in the holes of strangeness and loss, which allowed the

foster child to feel motivated to explore novel situations and show good psychological adjustment.

Another interesting aspect of curiosity was found in the current study. There was a positive connection between curiosity and the verbalizations Aber and Allen (1987) regarded as attention seeking, which seems to link a positive trait with an immature one. However, in this study attention seeking was measured as the amount of verbal interactions the child sought with the adult experimenter. If the adult were viewed as a novel stimulus, and curiosity in this study was a preference for novel stimuli, then curiosity as well as need for attention may have played a part in the child's verbal interactions. Another aspect of this relationship with curiosity and interaction with the adult emerges if the adult is called "a stranger." Ainsworth et al. (1978) found that some of their subjects were comfortable with and responsive to a stranger, whereas other children became upset in such a novel situation. The subjects who were able to respond to the stranger were the securely attached children, who also displayed more curiosity. So in this current study, this connection between curiosity and attention seeking may be additional evidence that

some of these children formed secure attachments sometime in their development. With this security they were able to interact verbally with the experimenter.

In future studies it would be interesting to compare the curiosity of foster children with that of a home-reared sample to understand if the degree of curiosity is similar. Such research might also illuminate to what degree a support figure influences this psychological characteristic.

Although there were no other significant group differences, there were several developmental trends associated with the age of the children. There were fewer problem behaviors for older children, which is somewhat unexpected given that the measure, the Child Behavior Checklist, is age-normed. Improvement in behaviors may be related to time in care as much as age, with stability and structure of care enabling these children to conform their behaviors to the expectations of the foster parents.

A second developmental trend was that dependency was lower for the older children. Dependency in this study was defined as the need for social reinforcement from the researcher and is expected to be excessive for children

who have suffered early social deprivation and insecure attachment (Aber & Allen (1987). Finding less dependency for older children could be a hopeful sign for children in foster care, suggesting that with time and care some are able to overcome the chaos and neglect of their early development and form useful and appropriate attachments, rendering them less dependent on social reinforcement.

More differences between the two groups were expected, but the lack of such differences is also of interest. This study did not replicate the findings of Aber and Allen (1987), and the companion sibling did not function as effectively as hypothesized. Aber and Allen (1987) found that curiosity, cognitive maturity, and low dependency clustered together, but in the current study, cognitive maturity was not related to the other two. Aber and Allen (1987) also found wariness and attention seeking were related, whereas in the current study no such relationship was found. Aber and Allen (1987) were able to use their two factors to distinguish between a group of maltreated children and a group of non-maltreated children. In the current study, only curiosity was a useful measure of difference between the two groups of foster children. One explanation for this

lack of replication is that foster children are not like other children. Although many come into treatment after being maltreated, they are not only maltreated and they are not normally treated. The lack of support for discriminating factors may be additional evidence that fitting a standard developmental framework onto the results from foster studies is not theoretically sound because foster children experience a qualitatively different developmental experience from home-reared children. They suffer early disruption, loss, and uncertainty. It is a wonder they are as good as they are.

The other interesting aspect of these results, as mentioned above, is the limited usefulness of a sibling as a figure of security and support. This may be explained by either the child not having a secure attachment to the sibling, or the child being unable to use the sibling to reduce anxiety and improve adjustment. There is some intuitive appeal to the former explanation given the confusion about birth siblings in these data. Recall that 21 of the 41 foster children were not able to correctly name their birth siblings, and 12 of the children were not able to understand that their companion

sibling was also part of their original family. It may be that for foster children, the companion sibling is not the important psychological figure assumed from theory. There may be an implicit assumption in theory and perhaps in policy that birth siblings have had sufficient time together in a stable family to form a familial relationship. For these children the chaos and disruptions may have come too soon for such bonds to form.

Family Experience

The second part of the hypothesis for this study was that foster children placed with a biological sibling would show more embeddedness in the foster family than foster children placed apart. Embeddedness was measured on the Foster Family Circle and did not differ between the two groups, failing to support the hypothesis. Although there were no differences between the two groups on the measures of family experience, the children in this study still revealed important information about the nature of foster families and their experiences of being in care.

More than half of the children made errors on the composition of their foster families. The errors were

greater for younger children; consequently some of this inaccuracy may have been affected by cognitive immaturity. But the fact that these children do not have internalized images of their families suggests they function at a pre-operational level of thinking. Given that the average age of the sample was 9 years, one might expect cognitive development to have progressed into the level of concrete operations.

There is another way to view the children's numerical inaccuracy about family composition. In the current study the composition of the foster family was scored from the point of view of the examiner. But Boss and Greenberg (1984) have stated that family members decide who is in and who is out of their family system and that outside observers can be wrong. From this perspective, it may be that these children in foster care gave an accurate portrayal of their family experience; a family is an arbitrary unit, defined by the physical presence of persons. These children perceived their foster family as an open system, with diffuse boundaries, just as Eastman (1979) theorized. The children were uncertain and confused about the structure and the boundaries of their foster family. And in fact,

confusion is the correct response to the disorganization of their family world. They also demonstrated that the structure of their birth families is vaguely known to them, suggesting the confusion in their early home lives.

The results of the family structure measures, although erroneous to an outside observer, are accurate representations of the foster child's experience with family. And in their accuracy lies the devastation of these children's lives, which once again emphasizes the degree of difference between the lives of foster children and the lives of children who are able to stay with their families.

The confusion and uncertainty about family structure revealed in the current study leads to questions about reunification of the birth family. Underlying reunion policy and sibling placements is an assumption that there exists a family structure that the child is aware of and values. For reunion with the birth family to be successful, these children need considerable amounts of contact with their parents and siblings to overcome the uncertainties shown in this study.

It is interesting to note that children who received more visits from their natural parents were rated by the

foster parents as being upset after these visits. One interpretation might be that the children were upset by being with parents who had neglected or mistreated them. Another interpretation might be the children were upset by the repetition of the separation and loss of their natural parents. This relationship suggests there is some bond between the foster child and the natural parents. And it appears that the bond works both ways. The natural parents whose families were intact longer tended to visit their children in care more frequently. The quality of visits was deemed more negative for those children who had lived longer with their natural parents before coming into care. This too suggests that these children are re-experiencing the loss of something they had, namely, their family. And again, children who had been with their natural families longer were more able to portray accurately their birth siblings on the Original Family Circle, which suggests that those children who were with their birth families for a sufficient period of time to develop awareness and attachment were able to reconstruct that structure and experience emotional distress at its destruction.

Validity of Exploratory Measures

One goal of this study was to assess the construct validity of the Family Boundary Ambiguity Questionnaire and the Foster Family Circle. Although the anticipated correlations among family measures did not materialize, results from this study were encouraging. Ambiguity was related to the number of parental visits. As defined by Boss and Greenberg (1984), ambiguity results from the physical absence and psychological presence of a family member. The natural parents of foster children are physically absent, and in some cases a family bond may never have developed with these parents. The number of parental visits can be seen as the measure of the physical reality that for some of these children a connection to the birth parents does in fact exist. The ambiguity measures showed that for some a psychological presence continues to exist even in the parents' absence. This suggests that the Family Boundary Ambiguity Questionnaire is in fact measuring psychological presence. Future studies are needed to expand the questionnaire and to study other groups of children who have lost their parents.

The Foster Family Circle, used to measure the degree of embeddedness within the foster family, was not correlated with any of the other family measures, so the construct validity of the idea of embeddedness was not demonstrated. The design of the instrument to measure embeddedness by an average distance is similar to other instruments and is simple enough for children. However, it may be difficult to measure embeddedness with an instrument that requires accuracy of family composition, especially with foster children. Because the instrument has some intuitive appeal, future studies with home-reared children, and a second measure with proven validity, would be interesting.

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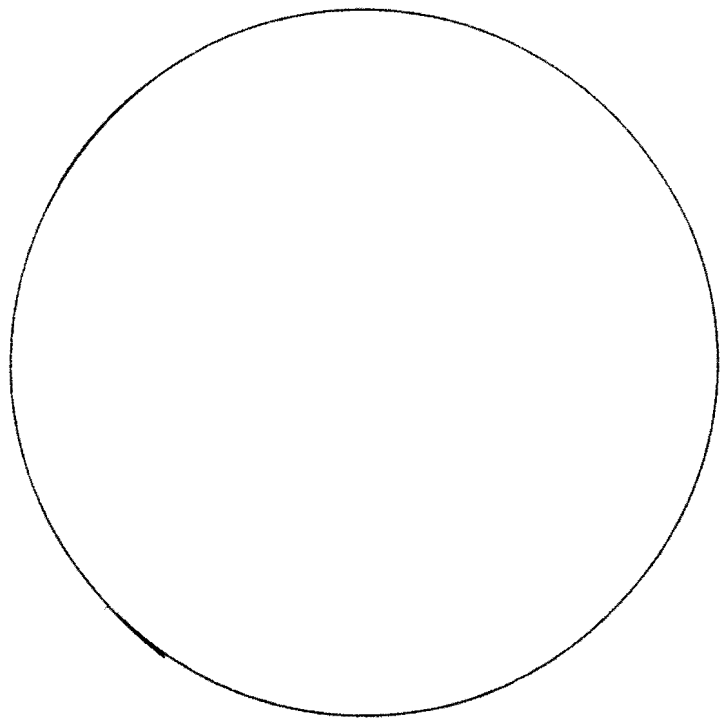
APPENDIX

Date:_____
Code No._____
Examiner:_____

FAMILY CIRCLE

Directions

Pretend you are standing at the dot at the center of the circle. Using a pencil, make a dot for each person in your original family (you may include pets if you like). Put the people you get along with the best, feel closest to, or like to be with the most, closest to you. Put the people you fight with a lot or don't like to be alone with farthest away from you. Be sure to label all the dots.

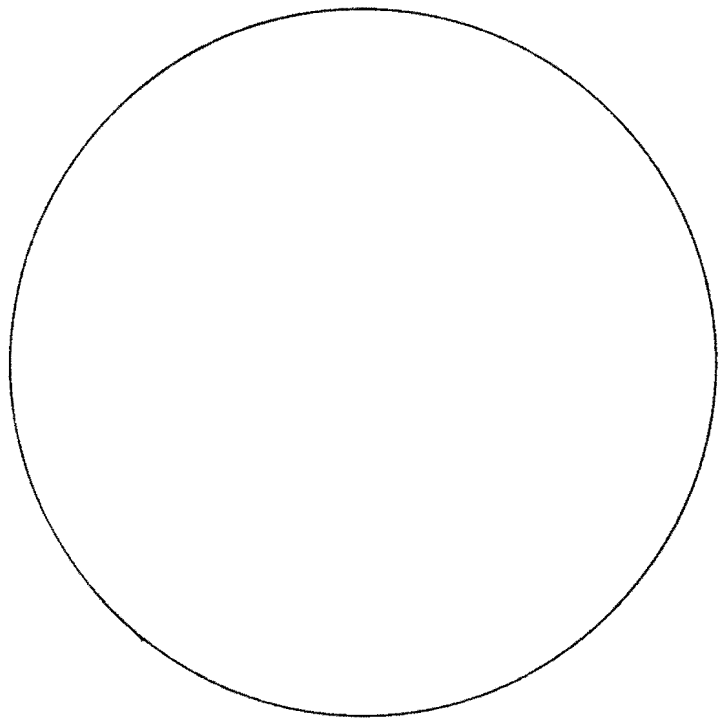


Date:_____
Code No._____
Examiner:_____

FAMILY CIRCLE

Directions

Pretend you are standing at the dot at the center of the circle. Using a pencil, make a dot for each person in your foster family (you may include pets if you like). Put the people you get along with the best, feel closest to, or like to be with the most, closest to you. Put the people you fight with a lot or don't like to be alone with farthest away from you. Be sure to label all the dots.



Date:_____
Code No.:_____
Examiner:_____

BOUNDARY AMBIGUITY

The following statements are about the changes in your family since you came to live here. There are no right or wrong answers. Choose the word the best says how you feel and put the number in the blank in front of each item.

Never =1 Rarely=2 Sometimes=3 Often=4 Almost always=5

___ 1. I think about my brothers and sisters a lot.

___ 2. When I'm here, I wonder how my other mother or father are getting along.

___ 3. I wonder what my other mother or father would say about my report card.

___ 4. I worry about which family I should be with on big holidays like Christmas or Thanksgiving.

___ 5. I will always think of my other family as my real family.

VITA

Susan M. Flynn was born in New Jersey, grew up in Ohio, and graduated from Rosary College in River Forest, Illinois. She has lived and worked in Chicago for many years. She entered The University of Tennessee, Knoxville in August of 1988 in the Clinical Psychology program. After four years of study in Knoxville she did a one-year clinical internship at Northwestern University Medical School in Chicago. In May 1994, she received the Doctor of Philosophy degree with a major in Psychology from The University of Tennessee, Knoxville.