

A COMPARISON OF THE MATURITY, DEVELOPMENT AND
ADJUSTMENT OF TWO-PARENT HOME CHILDREN
AND INSTITUTIONAL CHILDREN

A THESIS

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We hereby recommend that the thesis prepared under
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CHAPTER I

I N T R O D U C T I O N

Home and family are the most significant influences on a child's development. A child reflects the experiences of the parents, home, and the environment. What a child is depends on the home life and relationships experienced within the family. The years from one through 12 are the most formative years, determining personality, attitudes, and values of the person.

Some children are prevented from living with both parents or even in a family situation. Some children reside in institutions called children's homes. The father-figure is director of the home. The family includes housemothers, personnel, and many other boys and girls of all ages who reside within the same institution. Occasionally, as in the case of a few children included in the present study, a child may have one or more siblings living in the same institution.

R E V I E W O F L I T E R A T U R E

Home is the child's first environment, setting attitudes toward life and the people with whom the individual comes in contact. Hurlock (8) stressed that the child, identifying

with family members, imitates behavior and adjusts to life in the same manner. From the home, the child learns values, attitudes, and prejudices. Studies have shown that children's motivations are similar to those of the parents. As a child grows older, the pattern will be changed, but never eradicated.

Jenkins (9) asserted that the family's great influence can handicap a child in developing his capacities even if heredity is sound. The emotional experiences in the family determine how the child will meet the strains and frustrations to be encountered as maturing and relations with other people occur. Breckenridge (3) indicated that parents provide the child's background and his traditions. Parents signify protection and provision for the child and also supply the needed education and supervision.

According to Duvall (6), parents are expected to make the most adjustments during the years of childhood. Parents must help the child develop the capacities he possesses. Stone and Church (15) indicated the importance of building trust in the child's environment. Trust, important for the infant, extends into security for the growing child--the security of belonging, being loved and accepted.

Hurlock (8) stated that keen interest in, and love for, a child characterizes parental acceptance. "A good parent-

child relationship is an affectionate relationship." Duvall (6) stressed a child needs the comfort of being loved and enjoyed. The parents need to create an atmosphere of love within the home. Love should be shown to the child by parents: the presence of love should be apparent within the home. Jenkins (9) asserted that:

Children need parents who are warm, mature adults. Such parents welcome a baby at birth; accept his heredity and build on it; try to provide him with the best conditions for physical growth; and try to understand his particular pattern of growth. Through affection, encouragement, and consistent guidance and example they provide the child with the personal security that leads to self-confidence and mental health. . . . Pleasant physical surroundings make growth easier, but it is the emotional relationships within the home that make the essential difference between a home in which growth proceeds freely and one in which it is hampered.

Affection should be in combination with order and understanding. Strang (17) maintained that parents with this attitude realized limitations are of positive value in giving the child the stable background needed for growth. The child is only a part of the family, not the center of the family. Strang also stated that the home should meet the needs of all family members where the parents as well as the children realize the best potentialities of all. "The best development of the parents contributes to the best development of the child."

The emotional relationship between the family member and the child determines the influence that member will have on the child. The mother exerts the first great influence upon the small child. Gradually the father and sibling relationships become interwoven with the mother-child relationship. Family size and the child's position in the family affect the child and his outlook on life. The age difference and sex of the siblings have marked affect upon the child. Both Hurlock (8) and Strang (17) agreed that parental attitudes play the major role in determining a child's behavior and attitudes.

Hammond (7) and Todd (19) believed that the child forms the emotional basis for life in the preschool years. Children explore a wide variety of emotions and learn to internalize emotions. Children develop an awareness of emotional reactions and choose acceptable outlets for strong emotions.

Even as environment is different for each child, growth is also unique for each individual. One of the most impressive things about children is the rapidity with which growth occurs. Physical growth is only one factor of a child's development. The child also grows socially, mentally, emotionally and psychologically. Anderson (2) stated that changes occur in any relation within or without the human being, "in the experiences to which the growing person responds

to his increased intellectual and problem solving capacity, to his greater ease in using language and communicating with others, to his enriched social life with its web of inter-relations, and to his changed attitudes, activities, and values."

Emotions are an important part of a child's life. Emotions give enjoyment to routine experiences, as well as motivating and directing behavior. Hurlock (8) indicated that children who grow up in a home without emotional warmth find difficulty in establishing and maintaining affectional relations.

Caplan (4) stressed the child's emotional environment affects his developing personality. Such surroundings color perceptions and influences of the mother-child relationship. The direction of emotional development and the quality of emotional expression is influenced by environment. The tenderness a child is given and the quality of affection affects the child's capacity to later accept and give love. Emotional learning depends upon parent-child emotional interaction.

According to Todd (19), environmental influences determine "the extent, direction, and quality of developmental change in emotionality." Such stimulation is appropriate

and adequate and also essential. Pleasant emotions make a happy home. Todd stated:

Parents often fail to recognize, however, that happiness cannot exist if the pleasant emotions are dominated by the unpleasant--if frustrations, anxieties, jealousies, and envies are stronger and more persistent than the happy experiences they have provided for their child.

Emotional deprivation means that a child does not have opportunity to experience the pleasant emotions. The Children's Bureau (5) found that the most serious effects come with deprivation of affection. One of the major causes for emotional deprivation was not having one or more parents or from parental neglect or rejection. Children living in institutions often are deprived of needed love and attention. However, at the present, institutions are endeavoring to overcome this lack in the care of children. Often parents tend to withdraw open signs of love for children in the family. Children deprived of affection may be delayed in normal physical development. Such children do not know how to get along with people, and emotional development is especially affected. Parental deprivation results in unfavorable development in the child's personality.

Stott (16) found that the general pattern of immediate reactions to separation were strong protest and crying, followed by a withdrawal from people. After crying, came

apathetic behavior and signs of resignation and despair. Many of the children formed no emotional attachment to one of the institution's personnel and if the parents came, showed very little feeling as if personal contact were unimportant to them.

Emotional development is a product of maturation and learning. An emotional response may not appear early in life, but may develop later. Perception in the child results from the process of maturation in intellect. With the growth of understanding and imagination, a child reacts to situations differently. Hurlock (8) wrote two forms of learning, responsible for emotional development, are imitation and conditioning, or learning by association. Emotional reactions can be changed and spread from one person to another. Emotional responses become habitual, also. Such reactions do not necessarily have to be overt. A quiet child is not an emotional child.

Children's emotions differ greatly from adolescents and adults. All children have different emotional patterns. Hurlock (8) named eight characteristics of children's emotions:

- 1) Children's emotions are brief, lasting a few minutes, then ending abruptly.
- 2) A child's emotions are intense, even for trivial or unimportant frustrations.

- 3) They are transitory, shifting quickly from laughter to tears, because of the child's short attention span, lack of understanding of the situation, and the unreserved manner in which he expresses his emotions.
- 4) Children display their emotions frequently until they learn the social disapproval that follows their outburst.
- 5) Children's emotional responses differ greatly.
- 6) A child, unable to hide his emotions, shows his emotionality in behavior.
- 7) Children's emotions vary in strength as he grows older.
- 8) Emotional expressions change; the child learns to control his emotions more as development progresses.

Every child has basic emotional needs that must be met in order to be an emotionally stable individual. All emotions are important in the child's life and beneficial outlets should be encouraged. A child must have guidance in developing personal forms of emotional expression. Stott (16) concluded that:

Emotional "problems" in children arise most often from environmental influences and they can be controlled or alleviated only by the wise manipulation of the environment or by being subjected to undesirable environmental influences.

Emotions have a strong impact upon cognitive development or mental growth. According to Mussen (13), cognitive development refers to the "functions involved in understanding and dealing with the world around the individual."

These functions involve problem solving, perception, intelligence, language, and thinking.

Adults do not realize that children see things different from adults. Children are quick to notice and comment on everything that occurs, but perceptions are different from older persons. Perception, the major function in the cognitive process, develops through maturation. Vernon (20) wrote that with greater maturity, and increased perceptual learning, a child's early undifferentiated perceptions become more precise and sharper than heretofore observed. Mussen (13) asserted that:

The ability to perceive details and relationships among parts is generally acquired over an extended period of time. For only through experience do the various components and aspects of the world become related to one another in new ways and in new integrations.

As the child learns, he becomes more and more interested in what things do and what can be done with these things. Almy (1) asserted that "to know an object is to act on it." A child learns that to know is to understand and to change. A child is curious, but it is this curiosity that promotes growth.

The growing child is absorbed in watching, questioning, and exploring. Learning during the preschool years is the accumulation through experience, a child's first knowledge

of the world. The child learns through the five senses-- actually touching, hearing, smelling, tasting, and seeing. As Jenkins (9) indicated, more learning takes place during the years two and one half to five than in any other years in an individual's life. The questions, why, what, how and where, are constantly in a child's vocabulary.

If a child is to make the most of his curiosity, parents must first help the child cultivate the attitude of wanting to know. A child learns by experimentation. Parents should let the child learn, helping when the child asks for help or gets too frustrated with the problem. Jenkins (9) emphasized that preschool children are capable of absorbing more information than many adults realize, if the information is given in terms the child can understand when interest is awakened and when the child is ready and eager for knowledge. Questions must, however, be answered as accurately as possible within the limits of the child's understanding. Vernon (20) stated:

Because of his need to find out, to understand, to get what pleased him, the child sets out to explore and to investigate for himself, and to induce adults to give him the objects and information required. All the time he uses his powers of reasoning to seek knowledge about how, why, and wherefore. At first he can reason only by action--by doing things and discovering what happens. But verbal reasoning develops as an accompaniment to such activities. Perceptual and reasoning abilities improve through natural maturation: but they also require the opportunity for exercise, and they require encouragement and help from adults.

Mental development is a product of the child's interaction with the environment. According to Stott (16), the development of intelligence depended at all times on the experiences of the growing child. Stott discussed three concepts of intelligence. Potentiality, as the upper limit of mental development is generally determined genetically at the time of conception. The concept of capacity is the constant changing of intelligence as mental development progresses within the boundaries of potentiality. Ability is the third concept which includes the things an individual can do when the opportunity is presented. Intelligence tests measure ability. Most authors agree that intelligence consists of many factors.

The measurement of mental activity is noting observable changes in development and when possible, placing the changes in natural sequences occurring as the individual develops. Piaget (14) stated that mental development involves four major stages, each being a further development of the preceding period. The sensorimotor period lasts from birth throughout the first 18 months or two years of the child's life. Sensorimotor intelligence consists of coordinating successive perceptions with overt movements. An outgrowth of the sensorimotor period is the development of conceptual intelligence. The symbolic and preconceptual thought stage lasts until about four years of age. The period of

intuitive thought, lasting to seven or eight years, is based upon the child's immediate impressions of the objective situation. The third period, seven to 11 years, is a mental or representational process, a stage of concrete operation concerned with "objects that can be manipulated or known through the senses," when the child begins to exhibit logic in reasoning and conclusions. The final period, from 11 to 12 years through adolescence, marks the final advance to abstract conceptual thinking. The individual can create hypotheses and deduce logical conclusions.

Social adjustment, according to Hurlock (8), is the success with which a person relates to people. Socialization begins at home: the child applies the things learned at home to experiences he has at school and in the community. The child's attitudes toward people and social experiences and how the child gets along with other people depend largely upon the early formative years of life. These experiences depend upon the opportunities for socialization, the individual's motivation to take advantage of the given opportunities and the guidance given the child by parents, teachers and older siblings. If a child is to learn to live socially with others, he must have ample opportunities in which to learn. There is a close relationship between good social adjustment and happiness.

Johnson (10) believed that learning accepted forms of social behavior seems to be similar to the acquisition of knowledge and skill. Certain responses are learned for specific occasions. Children are expected to become better adjusted socially each year and to conform to social expectations for that age. A child may have difficulty in making good social adjustment if difficulty arises in making good adjustment at home. Duvall (6) found that children with warm responsive mothers developed more rapidly socially than children in a cold, restrictive atmosphere. Children behave more aggressively when mothers severely punish aggressive behavior than when punishment is light.

Stott (16) believed that most important in the development of the child are group experiences for developing a sense of social responsibility. Socialization is directed toward the child's peer group and the school. Yet for many children, school is the child's first experience in a group situation. A stable home background aids the child in becoming better adjusted socially. Having a good model to imitate helps the child in making good adjustments, and children are less apt to copy deviating parental patterns.

Every child wants and needs companionship. The family supplies the first social interaction. When the child is weaned from parents, friends and peer group become important.

Friends fulfill the child's need for companionship and contribute to the socialization process of the child. Some children need a large number of friends whereas others want just one friend. As Lambert (12) pointed out, the age of the child influences the number of friends he possesses.

Jenkins (9) stated that friendships in young children are transitory. A child begins cooperative play at three years of age. The preschool child plays with one friend, ignoring the rest of the children. The child's friend may be one child one day, another child the next day. Three year old children play with both sexes. At age four, however, friends become more interesting to the child than adults, whom the child depended upon previously. The special friends are of the same sex, although the child plays with both sexes. The five year old child quarrels and fights with friends, but at the same time, is learning better ways to get along with friends and is increasing in ability to handle situations. The child begins to conform to the group at age five. The individual, previously dependent upon mother and father to guide the child in acceptable behavior, begins to understand what is right and wrong. Jenkins indicated that the five year old can be taught to adjust to needs of the group and to respect reasonable authority.

Hurlock (8) stressed that friendship is a two way process. The child must want friends and be accepted as a friend. Whether a child will be accepted by a group does not only depend upon the child, but also on the interests and tastes of the group. Recognizing one's status in the group is important in making good social adjustment. Children that are accepted are friendly and cooperative. Good adjustment, however, comes only when the child is willing and able to accept himself. A child has to learn to behave in a socially accepted manner. How well the child succeeds depends upon the opportunities, motivation, and the guidance given by parents and teachers.

Friends are valuable to a child by giving him satisfaction in fulfilling his need for companionship and by continuing the socialization process. The right type of friend has a great influence on the socialization of the child. A friend who has an unfavorable influence on the individual can cause the child to make poor social adjustments and may make the young child anti-social.

Johnson and Medinnus (11) stated that personality patterns are made up of traits, or specific qualities of behavior combined to make a whole. Development of personality patterns is due to heredity, early family experiences, and events in later life. Personality is the product of interaction between environmental and hereditary factors. According

to Stott (16), personality is the total quality or combination of qualities that make a person unique and gives him his individual identity. An habitual way of regarding and thinking about people and life develop from the person's experiences with people.

No two individuals are alike: each is unique. Stott (16) emphasized that uniqueness is personality. Uniqueness results from a combination of attitudes, qualities, and behavior patterns of the individual. Physical features are important in determining one's self concept and the quality of interactions with others throughout life.

Children's physical endowments strongly influence the adults' attitudes and feelings toward the individual. Temperament and cognitive ability greatly influence the individual's uniqueness. The adequacy and effectiveness with which a person functions in meeting everyday life situations is an important aspect of personality.

Of all the personality components, Hurlock (8) believed self concept to be the most important, because of influences upon other traits. The home environment was also important, as every member of the family contributed to the child's self concept. The principal objective of the family and friends is to help the child appreciate himself as an individual, a person of importance. When children are secure in

their relationships with people, development and learning is rapid. The child's personality pattern, or dominant trait in the pattern, influences the behavior of the child and determines the type of environment that the child will choose when permitted to do so.

Personality patterns change; these changes are more pronounced in young children than in older individuals. A child's self concept is relatively stable and changes only when the child perceives changes in attitudes of significant persons toward the child. Strong personality characteristics based on hereditary traits are not easily altered. Once a trait has been developed through environmental influences, interests and attitudes are affected as well as behavior.

The child lays the foundation for the development of a healthy personality in the preschool years. The child develops a conscience which determines individual judgment and sense of values. Todd and Heffernan (19) indicated that a function of the nursery school is to develop healthy personalities in children, but furthering the sense of trust, autonomy, initiative, and conscience. There are six aspects of a healthy personality: safety, security, belonging, adequacy, self-realization, and integrity.

Hurlock (8) stated that the child's relationships with persons outside the home were more important than activities within the home. Outside influences modified home learnings. Each individual is made up of many selves. There are several roles to be played. The roles a person plays pre-determine behavior. Personality gains in complexity and consistency as maturing occurs. The roots of early years will penetrate many facets of behavioral living.

STATEMENT OF PROBLEM

The following question guided the development of the present study: How much influence does the family have upon a child during the developmental years? The main purpose of the study was to examine the mental maturity, social adjustment, personality and attitudes of children residing in two-parent homes and in institutions.

The specific objectives of the study were to:

- 1) Determine the significance of the presence of two parents upon a child's attitudes.
- 2) Investigate the extent of social adjustment in children from an institution.

Fifty-seven children enrolled in grades two through five were selected to participate in the study. There were 39 children from homes with two parents living together. No differentiation was made between step parents or natural

parents. Eighteen children living in two institutions participated in the study. Both the Sunshine Home in Dallas, Texas, and the Cumberland Presbyterian Home in Denton, Texas, cooperated in the study. The California Mental Maturity Test and the California Test of Personality were administered to the total group of 57 children.

TERMINOLOGY

The children were divided into two groups, two-parent home children and institutional children. The terms and definitions used by the authors of the California Test of Personality (18) are not general traits, but names for groupings of specific tendencies to think, act and feel. A list of terms used in the study follows:

Institutional children--Children living in an institution with the absence of natural or step parents.

Two-parent home--A family situation including the child and two parents, either both natural or with one step parent.

Sense of personal worth--An individual possesses a sense of being worthy when he feels well regarded by others, when others have faith in his future success, and believes that he has average or better than average ability.

Withdrawing tendencies--The individual who is said to withdraw substitutes the joys of a fantasy world for actual successes in real life.

Nervous symptoms--The individual who . . . suffers from one or more of a variety of physical symptoms such as loss of appetite, frequent eye strain, inability to sleep, or a tendency to be chronically tired. People of this kind may be exhibiting physical expressions of emotional conflicts.

Personal adjustment--That measurement consisting of self reliance, sense of personal freedom, and feeling of belonging, as well as sense of personal worth, withdrawing tendencies, and nervous symptoms.

Anti-social tendencies--An individual who endeavors to get his satisfactions in ways that are damaging and unfair to others. Normal adjustment is characterized by reasonable freedom from these tendencies.

Family relations--The individual who exhibits desirable family relationships is the one who feels that he is loved and well-treated at home, and who has a sense of security and self-respect in connection with the various members of his family.

Social adjustment--That part of the measurement comprised of social standards, social skills, and school relations as well as anti-social tendencies and family relations.

CHAPTER II

P R O C E D U R E

The author compared children living in homes with two parents and in institutions where no parents were in evidence. Each child was measured for emotional development, social adjustment, mental maturity and personality. Two objectives in this study were to determine the significance of the two parents upon a child's attitudes and to investigate the extent of social adjustment in children from an institution.

Thirty-eight children enrolled in the fourth grade at Stonewall Jackson Elementary School in Denton, Texas, and living in a family situation comprised Group A in the study. The public school children lived with two parents, either both natural parents or one might have been a step-parent. The teachers selected from class rolls the children living in a two-parent family situation. No regard to race, sex, placement or number in the family was included in this study. Only the fact that each child had two parental figures in the home was important.

Children enrolled in grades two through five were used in the study. Group B included children who were residing

in an institution, either the Cumberland Presbyterian Home in Denton, Texas, or the Sunshine Home in Dallas, Texas. Eleven children were from the Sunshine Home and seven were from the Cumberland Home. Most of the students at the Cumberland Home had been residents of the home for more than a year. Several had brothers and sisters living within the home. The participants were from broken homes or homes where children were not wanted. A few of the children had been at the home for most of their life. On the other hand, the students at the Sunshine Home had been at the home for only a few months. Many had not become adjusted to the new life at the home when the tests were given.

Most of the participants had parents living in separate abodes from the children. Reasons for separation included: the parents not wanting the children; an inability to provide adequately, either financially or affectionately; a lack of discipline or control over the young people; or having a "broken" home either from divorce or death.

Most of the children from the Sunshine Home, a member of the juvenile system, were referred to the home by the Juvenile Court in Dallas County. A relative or even a parent placed the children in the Cumberland Home. In situations where legal proceedings were involved, the Denton County and District Courts referred children to the Cumberland Home.

The students were given the California Test of Personality. The author administered the tests at both Stonewall Jackson School and the Cumberland Home. Tests given at the Sunshine Home were administered by teachers in the home. Both the Primary and the Elementary version were used. Students in grades two and three took the Primary form and the students in grades four and five received the Elementary form. Scores were converted to percentiles to equalize the performance on both versions of the test.

Total scores on the California Mental Maturity Test were obtained for all the children involved in the study. These tests were administered by the schools and were part of the child's permanent record.

Data were analyzed using the "t" test. Medians and means were computed for both groups and profile sheets made for each group. Percentages for the number of children scoring in each percentile were tabulated for use in the study.

CHAPTER III

P R E S E N T A T I O N A N D A N A L Y S I S O F D A T A

The most significant influences on a child's development are home and family. The purpose of this study was to find the amount of influence the family has in the two specific groups of children in the areas of mental maturity, social adjustments, and personality.

CALIFORNIA MENTAL MATURITY TEST

Thirty-eight children enrolled in the fourth grade at Stonewall Jackson Elementary School during the spring term, 1968, were included in this study. Most of the children in this study were from low socioeconomic families. A few, however, were children of college students or professors.

Tests were administered to children in two of the fourth grade classes. The teachers chose from class rolls the students having two parents in the home, either natural or step-parents.

All the children were enrolled in grades two through five in the 1967-1968 school year. Only the institutional children varied in grade levels. Two children were in the

second grade, four in the fourth grade, and six in both the third and fifth grades.

<u>Grade</u>	<u>Children</u>			
	<u>Group A</u>		<u>Group B</u>	
	<u>Number</u>	<u>Per cent</u>	<u>Number</u>	<u>Per cent</u>
2	0	0	2	11
3	0	0	6	33
4	38	100	4	22
5	0	0	6	33

The children had been given the California Mental Maturity Test earlier in the year as part of the regular testing program in the school. The results from this test for the children enrolled in the Denton Independent School District were obtained from the child's permanent record in the school office. The scores for the children in the Sunshine Home were obtained from the Director of the home. The background scores used in this study were the total language and non-language scores.

The range on the California Mental Maturity Test for both the institutional children and the children from homes with two parents was 66 to 157. (See Table I.) The range was greater for the children from the institutions, Group B. The difference was a total of 81 points with the low score of 66 and a high score of 147.

TABLE I
DIFFERENTIATION OF MEANS FOR GROUP A AND
GROUP B USING "t" TEST

	Means		Level of Probability
	Group A	Group B	
Mental Maturity	131.42	97.94	.001
Personal Adjustment	30.37	29.22	n.s.
Self Reliance	44.47	43.33	n.s.
Sense of Personal Worth	52.71	39.56	.200
Sense of Personal Freedom	31.74	29.11	n.s.
Feeling of Belonging	35.74	24.44	.200
Withdrawing Tendencies	42.50	42.44	n.s.
Nervous Symptoms	30.37	30.94	n.s.
Social Adjustment	30.97	27.22	n.s.
Social Standards	38.79	39.00	n.s.
Social Skills	41.05	39.06	n.s.
Anti-social Tendencies	26.18	23.83	n.s.
Family Relations	31.34	33.94	n.s.
School Relations	38.84	32.78	n.s.
Community Relations	33.68	27.83	n.s.
Total Adjustment	31.32	26.50	n.s.

Using the "t" test, the means for Mental Maturity were significant at the .001 level of probability. The mean score for Group A was 131.42 as compared to 97.94 mean score for Group B (Table I). Group A, the two-parent home children, had a smaller variance of 49 points with a low score of 108 and a high score of 157. Median scores were only slightly different for both groups. The institutional children's median score was 93.50 compared with the two-parent home children with a median of 131.0.

<u>Children</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Group A	108-157	131.42	131.0
Group B	66-147	97.94	93.5

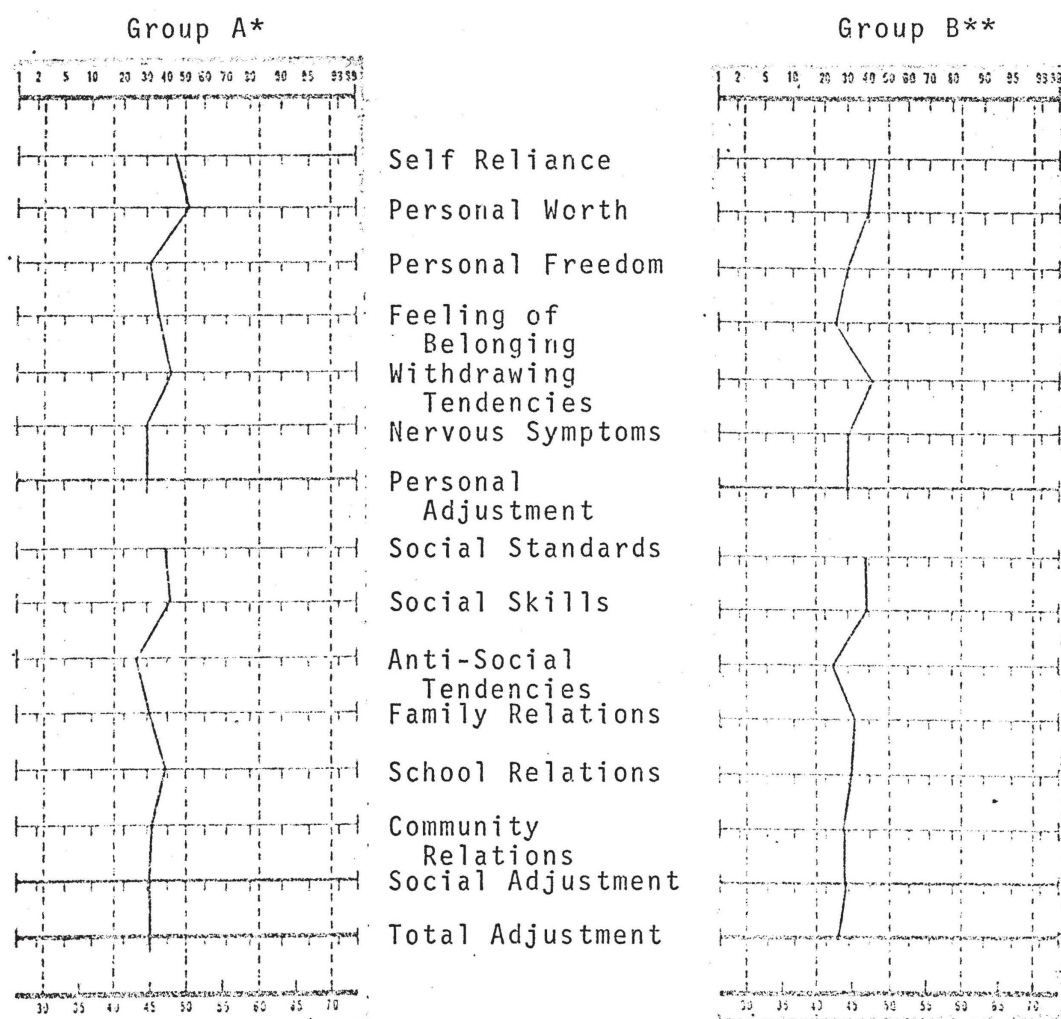
The low scores of the institutional children were explained to the author as the result of neglect in environment as well as education. The children at the Sunshine Home lacked opportunities for mental growth before coming to the home. Many of the participants had not been required to attend school regularly; the parents did not care whether the children went to school at all. Most of the children were new at the home, and would score several points higher when taking the next California Mental Maturity Test, as a result of the enforced study routine at the home during the regular school term and the classes taught by personnel of the home during the summer months.

Before entering the Cumberland Home, many of the children also did not have adequate opportunities for learning in individual homes. Several of the children attended summer classes held in the public school while living at the home. Children in both homes had lived in situations where the parents or guardians took little or no interest in the education of the children.

CALIFORNIA TEST OF PERSONALITY

The scores on the California Test of Personality were converted to percentile ranks because of the two forms given (Figure 1). The Primary form was given to the children who were in the second and third grades, and the Elementary form was given to the other children. Raw scores were not used in this comparison because the possible scores for the Primary version were not based on the same number of possible answers as the Elementary test.

Personal Adjustment, Test I on the California Test of Personality included questions on Self Reliance, a Sense of Personal Worth and Personal Freedom, a Feeling of Belonging, and Freedom from Withdrawing Tendencies and Nervous Symptoms. The percentile ranks for the two-parent home children varied slightly from the ranks for the institutional children. Self Reliance scores ranged from 10 to 90 percentile rank



*Two-parent home children
 **Institutional children

Figure 1
California Test of Personality
 Profile for Groups A and B

for both groups, with mean ranks for Group A slightly higher than for Group B. The children from homes having two parents had a mean rank of 44.47 and the institutional children had the mean rank of 43.33.

<u>Group</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
A	44.47	40.17	10-90
B	43.33	40.00	10-90

How the child feels in regards to other people and self belief signify a Sense of Personal Worth. The range in this section was similar in both groups. The two-parent home children scored significantly higher in the area than did institutional children. The means differed at the .100 level of probability (Table I). This was the chief point of difference between the two groups of children participating in the study. The mean rank for the two-parent home children was 52.71 while the mean rank for the institutional children was 39.56. The median ranks were 55.00 and 40.00 respectively.

<u>Areas of Comparison</u>	<u>Group</u>	
	<u>A</u>	<u>B</u>
Mean	52.71	39.56
Median	55.00	40.00
Range	5-98	2-90

Data concerning Personal Freedom did not present significant comparison. The range was the same for both Group A and B, 1 to 70. The medians differed with the institutional children having a higher rank, 25.00 than the children living in the family situation. The two-parent home children ranked in the 20th percentile with 19.61 median. The means differed slightly: Group A had the mean of 31.24 compared with the 29.11 mean rank of Group B.

<u>Group</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
A	31.74	19.61	1-70
B	29.11	25.00	1-70

Most of the children ranked in the 20 through the 70 percentiles in the areas of Self Reliance, Sense of Personal Worth, and Personal Freedom (Table II). Thirty-two per cent of the 56 children were in the 20 to 30 percentile on Self Reliance, and 17 per cent were in the 40 to 50 range. However, 26 per cent of the total group of children ranked within the 60 to 70 percentile.

More children ranked higher on a Sense of Personal Worth than on a Sense of Personal Freedom. Only 27 per cent of the 56 children in this study ranked less than the 40 percentile on Sense of Personal Worth. In the area of Sense of

TABLE 11
PERCENTAGE OF RANKS ON SELF RELIANCE, SENSE OF PERSONAL WORTH,
AND SENSE OF PERSONAL FREEDOM FOR 56 CHILDREN

Percentile	Self Reliance						Sense of Personal Worth						Sense of Personal Freedom					
	Group A*		Group B**		Total		Group A		Group B		Total		Group A		Group B		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
0-2	0	0	1	5	1	1	2	5	1	5	3	5	4	10	3	16	7	12
5-10	5	13	0	0	5	8	3	8	2	10	5	8	7	18	3	16	10	17
20-30	12	31	6	33	18	32	4	10	3	22	8	14	10	26	4	22	14	25
40-50	6	16	4	22	10	17	10	26	8	43	18	32	8	21	6	33	14	25
60-70	9	23	6	33	15	26	9	23	2	10	11	19	7	18	2	10	9	16
80-90	6	16	1	5	7	12	8	21	1	5	9	16	0	0	0	0	0	0
95-98	0	0	0	0	0	0	2	6	0	0	2	3	0	0	0	0	0	0

*Two parent home children

**Institutional children

Personal Freedom, over 50 per cent of the children were in the 0 to 40 percentile. Seventy-five per cent of the family oriented children were in the 40 or over range and 52 per cent of the institutional children were within the same range in Sense of Personal Worth. More institutional children ranked 40 or over in Sense of Personal Freedom with 43 per cent than did the two-parent home children with 39 per cent.

The section relative to a child's Feeling of Belonging had the second significant difference on the California Test of Personality in this study of two groups. The means differed at the .200 level of probability. The family oriented children had the mean of 35.74 while the institutional children had the mean of 24.44 (Table I). Median ranks differed by only five points, with Group A having 30.33 and Group B having 25.00 median rank.

<u>Areas of Comparison</u>	<u>Group</u>	
	<u>A</u>	<u>B</u>
Mean	35.74	24.44
Median	30.33	25.00
Range	1-90	1-90

The last two sections of Test I, Personal Adjustment, were Freedom from Withdrawing Tendencies and Nervous Symptoms. The range of percentile ranks were almost the same for the

two sections. Withdrawing Tendencies ranged from 0 to 95 for Group A and 2 to 95 for Group B. Freedom from Nervous Symptoms was similar with the difference being 1 to 95 for the institutional children.

Withdrawing Tendencies mean ranks were 42.50 for Group A and 42.44 for Group B. Median ranks were slightly lower with 35.00 median for the first group and 39.83 for Group B. The medians for Nervous Symptoms were closely related with 19.75 for the two-parent home children and 19.83 for the institutional children. Means for the section were 30.66 and 30.94 respectively.

<u>Areas of Comparison</u>	<u>Withdrawing Tendencies</u>		<u>Nervous Symptoms</u>	
	<u>Group A</u>	<u>Group B</u>	<u>Group A</u>	<u>Group B</u>
Mean rank	42.50	42.44	30.66	30.94
Median rank	35.00	39.83	19.75	19.83
Range of percentile	0-95	2-95	0-95	1-95

In all three of the areas, most of the children ranked in percentiles 20 and 30 (Table III). Thirteen, 34 per cent of the two-parent home children, and seven, 38 per cent of the 18 institutional children scored in the 20 and 30 percentile for a total of 35 per cent of the 56 children in the area of Feeling of Belonging. Forty-five per cent of the total group in this study showed a tendency toward Withdrawing

TABLE III
PERCENTAGE OF RANKS ON FEELING OF BELONGING, WITHDRAWING TENDENCIES,
AND NERVOUS SYMPTOMS FOR 56 CHILDREN

Percentile	Feeling of Belonging						Withdrawing Tendencies						Nervous Symptoms					
	Group A*		Group B**		Total		Group A		Group B		Total		Group A		Group B		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
0-2	3	8	3	16	6	10	1	2	2	10	3	5	6	16	4	22	10	17
5-10	8	21	4	22	12	21	6	16	2	10	8	14	7	18	3	16	10	17
20-30	13	34	7	38	20	35	12	31	3	16	15	26	13	34	4	22	17	30
40-50	3	8	3	22	6	10	7	18	5	27	12	21	3	8	4	22	7	12
60-70	7	18	0	0	7	12	4	10	3	16	7	12	6	16	0	0	6	10
80-90	4	10	1	5	5	8	7	18	1	5	8	14	2	5	0	0	2	3
95-98	0	0	0	0	0	0	1	2	2	10	3	5	1	2	3	16	4	7

*Two parent home children
**Institutional children

Tendencies, with 49 per cent of the children being from two-parent homes. In Freedom from Nervous Symptoms, 68 per cent or 26 of the 38 family oriented children and 11, or 60 per cent of the institutional children scored under the 40th percentile rank. Thirty seven, or 64 per cent of the 56 children taking the test scored in the lower percentiles.

The total ranking for Personal Adjustment was a composite of the sections mentioned previously. There was little difference in the mean ranks of the two groups, yet there was a difference of 10 points in the median ranks. Group B had the higher median rank of 30.50 percentile, while Group A had 19.81 percentile rank. Means were 29.22 for Group B and 30.37 for Group A. Group B percentile ranks were more homogenous than Group A: the institutional children had the closer range from the first percentile to 70 while the two-parent home children ranged from 2 to 90.

<u>Areas of Comparison</u>	<u>Children</u>	
	<u>Group A</u>	<u>Group B</u>
Mean	30.37	29.22
Median	19.81	30.50
Range	0-90	1-70

Social Adjustment, which encompassed Test II, included sections on Social Standards and Skills, Freedom from Anti-Social Tendencies, and the child's Relationships within the

Family, School, and Community. Data showed that the two participating groups were very closely related in these areas. There was no significant difference using the "t" test in any of the mean ranks.

Social Standards, a section showing the child's attitudes toward friends, provided little contrast in the mean or median ranks. Mean rank for Group A was 38.79, with a median of 40.36. The institutional children had a slightly higher mean rank of 39.00 with the median percentile of 40.25.

Data on Social Skills showed that the mean ranks for both groups were higher than median ranks, which were 29.83 for the two-parent home children and 29.79 for the children in the institutions. Mean ranks were 41.05 and 39.06 respectively. The range of percentile ranks was the same, yet Group A had the higher rank of 95 compared to Group B rank, 90. Two-parent home children had the low rank of 5; and the low score for Group B ranked in the first percentile.

<u>Areas of Comparison</u>	<u>Social Standards</u>		<u>Social Skills</u>	
	<u>Group A</u>	<u>Group B</u>	<u>Group A</u>	<u>Group B</u>
Mean rank	38.79	39.00	41.05	39.06
Median rank	40.36	40.25	29.83	29.79
Range of ranks	1-90	2-90	5-95	1-90

Data showed that both groups had a low median percentile rank on Freedom from Anti-Social Tendencies, but the mean ranks were not very different from other means in the study. The children from institutions scored a percentile higher than the two-parent home children who had the low median rank of 4.70. Group B, the institutional children, were in the 10th percentile with median 9.75. Mean ranks did not differ greatly with other parts of the test as did the median. Group A, mean rank 26.18, was slightly higher than Group B with 23.83 mean.

<u>Group</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
A	26.18	4.70	1-90
B	23.83	9.75	1-90

Over 50 per cent of the 56 children scored within the 40 to 50 percentiles in Social Standards; however, only 42 per cent of the children scored as high in Social Skills (Table IV). In the area of Social Standards, the distribution of scores were fairly equal. The largest percentage in Social Standards was in the 80 to 90 range with 21 per cent. Fifty-four per cent of the institutional children ranked 40 or over, yet only 10 per cent of those children were in the 80 to 90 percentile.

TABLE IV
PERCENTAGE OF RANKS ON SOCIAL STANDARDS, SOCIAL SKILLS, AND
ANTI-SOCIAL TENDENCIES FOR 56 CHILDREN

Percentile	Social Standards						Social Skills						Anti-Social Tendencies					
	Group A*		Group B**		Total		Group A		Group B		Total		Group A		Group B		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
0-2	6	16	1	5	7	12	1	2	2	10	3	5	15	39	3	16	18	32
5-10	5	13	2	10	8	14	7	18	2	10	9	16	9	23	7	38	16	26
20-30	6	16	5	27	11	19	13	34	7	38	20	35	3	8	4	22	7	12
40-50	7	18	4	22	11	19	6	16	3	16	9	16	1	2	2	10	3	5
60-70	5	13	4	22	9	16	6	16	2	10	8	14	6	16	0	0	6	10
80-90	8	21	2	10	10	17	2	5	2	10	4	7	4	10	2	10	6	10
95-98	0	0	0	0	0	0	3	8	0	0	3	5	0	0	0	0	0	0

*Two parent home children
**Institutional children

One-third of the 56 children ranked in the 20 to 30 range in Social Skills. Thirty-four per cent of the two-parent children and 38 per cent of the institutional children scored within the same range. Three, or 8.0 per cent of the family oriented children ranked in the 95 to 98 percentile, whereas none of the children scored as high in Social Standards.

Only 25 per cent of the 56 children ranked over 40 percentile in Anti-Social Tendencies. Thirty-two per cent of the total group placed within the 0 to 2 range, while 28 per cent ranked in the 5 to 10 percentile range. Twenty-five per cent of the total group scored 40 percentile or over in this area.

The children in the institutions had a slightly higher mean rank on the family relations section of the test, scoring 33.94 compared to 31.34 for the two-parent home children. Median ranks were 30.25 for Group A and 29.75 for Group B, with both groups scoring the high rank within the 80 percentile.

<u>Areas of Comparison</u>	<u>Children</u>	
	<u>Group A</u>	<u>Group B</u>
Mean rank	31.34	33.94
Median rank	30.25	29.75
Range of percentiles	1-80	0-80

School Relationships for both groups were very similar in median ranks: Group A ranked 29.83 and Group B had the median 30.25. Mean ranks were higher for the two-parent home children, with a mean of 38.84, compared to the institutional children ranking 32.78. The scores for the former ranged from 5 to 80. This showed the most contrast in the high rank sectional scores in both parts of the test.

Community Relations ranks showed the greatest difference in the area of Social Adjustment, but was not significant. Group A had the mean rank 33.68 and the median 40.28, whereas Group B had the mean 27.22 and the median rank 19.75 concerning the child's relationships within the community. Percentiles ranged from 1 to 80 and 2 to 80, the highest rank for both.

<u>Areas of Comparison</u>	<u>School Relations</u>		<u>Community Relations</u>	
	<u>Group A</u>	<u>Group B</u>	<u>Group A</u>	<u>Group B</u>
Mean rank	38.84	32.78	33.68	27.83
Median rank	29.83	30.25	40.28	19.75
Range of ranks	1-95	5-80	2-80	1-80

Both groups ranked the same in Family Relations: 42 per cent of both the family- and the institution-oriented children scored higher than the 40 percentile, as did 42 per cent of the total population (Table V). However, 13, or 23

TABLE V
PERCENTAGE OF RANKS ON FAMILY, SCHOOL, AND COMMUNITY RELATIONS FOR 56 CHILDREN

Percentile	Family Relations						School Relations						Community Relations					
	Group A*		Group B**		Total		Group A		Group B		Total		Group A		Group B		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
0-2	11	28	2	10	13	23	1	2	0	0	1	1	3	8	1	5	4	7
5-10	5	13	3	16	8	14	9	23	3	16	12	21	11	28	6	27	16	28
20-30	6	16	5	27	11	19	10	26	9	50	19	33	3	8	4	22	7	12
40-50	5	13	3	16	8	14	8	21	3	16	11	19	9	23	6	33	15	26
60-70	5	13	4	22	9	16	3	8	1	5	4	7	10	26	1	5	11	19
80-90	6	16	1	5	7	12	3	8	2	10	5	8	2	5	1	5	3	5
95-98	0	0	0	0	0	0	4	10	0	0	4	7	0	0	0	0	0	0

*Two parent home children

**Institutional children

per cent scored in the 0 to 2 range, with 14 per cent in the 5 to 10 range. A slight majority of the family oriented children, 28 per cent, were within the 0 to 20 percentile, with only 10 per cent of the institutional children ranking the same. Five of the 18 institutional children, or 27 per cent, ranked in the 20 to 30 percentile.

Only 26 of the 56 children ranked higher than the 40 percentile in School Relations, whereas 50 per cent of the children ranked as high on Community Relations. One-third of the 56 children ranged in the 20 to 30 percentile, 26 per cent family oriented children and 50 per cent of the institutional children for 33 per cent of the total group. One-third of the institutional children, 33 per cent, ranked within the 40 to 50 percentile, whereas most of the two-parent home children ranked within 3 ranges. Twenty-eight per cent scored in the 5 to 10 percentile, 23 per cent in the 40 to 50 range, and 26 per cent in the 60 to 70 range.

Social Adjustment ranks were similar for both groups. Median ranks for Group A were 19.83 and 19.70 for Group B. Means were slightly different as the percentile ranks were 30.97 for Group A and 27.22 for the Group B children.

Percentiles ranged from 1 to 98 for the family based children and 5 to 50 for the children residing in the institutions.

<u>Group</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
A	30.97	19.83	1-98
B	27.22	19.70	5-50

Means for the Total Adjustment were higher for the two-parent home children than for the children from an institution. Group A had the mean average of 31.32, and Group B had the mean of 26.50. However, Group B had the higher median, 25.00, than did Group A with 19.95. Group B's range, 2 to 60, was smaller than Group A's range which was 5 to 90.

<u>Areas of Comparison</u>	<u>Children</u>	
	<u>Group A</u>	<u>Group B</u>
Range of percentiles	5-90	2-60
Median rank	19.95	25.00
Mean rank	31.32	26.50
Level of probability	DF	n.s.

The children from institutions placed the same as the two-parent home children when charted by ranks. The children placed almost the same on each section of the test. The percentile range was similar on the individual sections, but was different on Personal, Social, and Total Adjustment.

There was a difference of 20 or more points on the high percentile of each adjustment group.

One-third of the 56 elementary children in this study scored in the 20 to 30 percentiles on both Personal Adjustment and Total Adjustment, and 70 per cent ranked under 40 in Social Adjustment (Table VI). Only 15 per cent scored within the 60 to 90 percentile, 17 per cent in the 40 to 50 range, and 31 per cent, 10 or under in Total Adjustment. One child in the institutional group and eight of the 38 two-parent home children scored 60 or over on the California Test of Personality Total Adjustment.

TABLE VI
PERCENTAGE OF RANKS ON PERSONAL, SOCIAL AND TOTAL
ADJUSTMENT FOR 56 CHILDREN

Percentile	Personal Adjustment						Social Adjustment						Total Adjustment					
	Group A*		Group B**		Total		Group A		Group B		Total		Group A		Group B		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
0-2	2	5	1	5	3	5	5	13	0	0	5	8	0	0	1	5	1	1
5-10	8	21	3	16	11	19	13	34	5	27	18	32	13	34	4	22	17	30
20-30	14	35	5	33	20	35	9	23	7	38	16	28	12	31	7	38	19	33
40-50	8	21	7	38	15	26	4	10	5	27	9	16	5	13	5	27	10	17
60-70	4	10	1	5	5	8	3	8	1	5	4	7	4	10	1	5	5	8
80-90	2	5	0	0	2	3	2	5	0	0	2	3	4	10	0	0	4	7
95-98	0	0	0	0	0	0	2	5	0	0	2	3	0	0	0	0	0	0

*Two parent home children
**Institutional children

CHAPTER IV

S U M M A R Y , C O N C L U S I O N , A N D R E C O M M E N D A T I O N S

The purpose of this study was to compare the mental maturity, personal development, and social adjustment of children living in families with two parents and children residing in institutions or "children's homes." The children were given the California Test of Personality and the California Mental Maturity Test.

Each group was compared in mental maturity, social adjustment, and personality. The children scored approximately the same on the major test of the California Test of Personality; however, one section, Sense of Personal Worth, presented significant differences at the .100 level of probability on the "t" test. The two-parent home children were higher in this portion than were the institutional children.

The family based children also scored significantly higher on the California Mental Maturity Test at the .001 level of probability. This difference was explained to the author by the Director of one of the homes. Such differences were the result of environment and the lack of interest some

parents exhibited in the child's education prior to the institution becoming the participant's home.

The developmental programs carried out by the Directors of the institutions in this study emphasized the mental and personal development for each child. The personnel had a genuine interest and encouraged each child in developing potential growth and achievement. Apparently this interest had not been evident in the child's own home. Not only physical wants, but also the social, spiritual, and emotional needs of the children were being taken care of by the institutions. The implications of this study showed that institutions are doing increasingly better work in aiding the child's development than has been done previously.

This study suggests the need for parents to develop a keen insight into the child's emotional needs and development. Parents may need to be more expressive in feelings toward the child and to help the young person to understand his emotional needs.

Suggested areas or conditions that would strengthen the work include children in a middle socioeconomic group. Children living in orphanage homes and having no parental influences might give a more realistic comparison. Further explanation might include a study of children from two parent families attending boarding schools.

B I B L I O G R A P H Y

1. Almy, Millie, Edward Chittenden, and Paula Miller. Young Children's Thinking. New York: Columbia University, Teachers College Press, 1966.
2. Anderson, J. E. "Behavior and Personality." In Eli Ginzberg, The Nations Children, Vol. 2. Golden Anniversary White House Conference for Children and Youth, Columbia University Press, 1960.
3. Breckenridge, Marian E., and E. Lee Vincent. Child Development. 2nd edition. Philadelphia: W. B. Saunders Company, 1950.
4. Caplan, Gerald (editor). Emotional Problems of Early Childhood. New York: Basic Books, Inc., 1959.
5. Children's Bureau. Your Child From One to Six. Washington, D. C.: United States Department of Health, Education, and Welfare, 1962.
6. Duvall, Evelyn Millis. Family Development. 3rd edition. Philadelphia: J. B. Lippincott Company, 1967.
7. Hammond, Sarah Lou, Ruth J. Dales, Dora Sikes Skipper, and Ralph L. Witherspoon. Good Schools for Young Children. New York: The Macmillan Company, 1963.
8. Hurlock, Elizabeth B. Child Development. 4th edition. New York: McGraw-Hill Book Company, 1964.
9. Jenkins, Gladys Gardner, Helen S. Shacter, and William W. Bauer. These Are Your Children. 3rd edition. Chicago: Scott, Foresman and Company, 1966.
10. Johnson, Buford J. Child Psychology. Baltimore: Charles C. Thomas, 1932.
11. Johnson, Ronald C., and Gene R. Medinnus. Child Psychology: Behavior and Development. New York: John Wiley and Sons, Inc., 1965.

12. Lambert, Clara. Understand Your Child From Six to Twelve. Public Affairs Pamphlet #144. 21st edition. New York: Public Affairs Committee, 1960.
13. Mussen, Paul H. The Psychological Development of the Child. Foundations of Modern Psychology Series. Richard S. Lazarus, editor. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.
14. Piaget, Jean. The Origins of Intelligence in Children. (Translated by Margaret Cook.) New York: W. W. Norton and Company, Inc., 1952.
15. Stone, L. Joseph, and Joseph Church. Childhood and Adolescence. New York: Random House, 1964.
16. Stott, Leland H. Child Development: An Individual Longitudinal Approach. New York: Holt, Rinehart and Winston, Inc., 1967.
17. Strang, Ruth. An Introduction to Child Study. 4th edition. New York: The Macmillan Company, 1967.
18. Thorpe, Louis P., Willis W. Clark, and Ernest W. Tiegs. California Test of Personality. Monterey, California: California Test Bureau, 1953.
19. Todd, Vivian Edmiston and Helen Heffernan. The Years Before School. New York: The Macmillan Company, 1964.
20. Vernon, M. D. "The Development of Perception in Children," Human Development. Edited by Ira J. Gordon. Chicago: Scott, Foresman and Company, 1965.