A COMPARATIVE STUDY OF KIBBUTZ CHILDREN'S AND CITY CHILDREN'S
CONCEPTS OF FAMILY AND SELF WITHIN THE FAMILY

by
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Rachel Tal
ABSTRACT

A Comparative Study of Kibbutz Children's and City Children's Concepts of Family and Self Within the Family

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The purpose of this study was to determine if any significant difference existed between kibbutz and city children in terms of their concept of family and concept of self within the family.

The subjects chosen for the investigation consisted of 51 pupils in the third and fourth grades from two communities in Israel. The two communities were a kibbutz community and a middle class small suburb community. Raw score data were obtained for the investigation from two testing devices. The Draw-A-Family Test (DAF) was used here in order to gain insight to the subjects' perception of the two concepts under investigation; the written attitude test was constructed in order to gain broader understanding of the subjects' concepts under study. Three raters were used in order to analyze the data obtained from the DAF Test. Interrater reliability coefficient was computed using the Pearson Product Coefficient technique. Using the nonparamatic chi square technique, a comparison was made of the two subject groups' responses to each individual item on the DAF Test and on the written attitude test. Validation
of findings on the DAF Test were done by using the Pearson Correlation Coefficient technique. With the use of the same statistical technique, a further comparison was made of subjects' responses to items on the DAF Test which were designed to measure the same concepts. Using the Mann Whitney U Test between groups, a statistical comparison of the two groups' responses to each of the testing devices was conducted.

1. An analysis of subject responses on the DAF Test showed significant difference between the two groups' concepts of family and of self within the family. Drawings produced for this study by the kibbutz children reflected a significantly more positive view of the concepts under observation.

2. Statistical analysis of the reliability of the DAF Test demonstrated high correlation between items dealing with the same concepts.

3. No significant difference between the two groups' concepts of family and of self within the family was found in the statistical analysis of subjects' responses to the written attitude test. However, subjects' unexpected added responses to the written attitude test were interpreted as being supportive of the difference found in the DAF Test.

4. Statistical analysis of relations between the two testing devices showed low negative correlation between the DAF Test and the written attitude test.

5. Investigation of subjects' responses on both tests were interpreted as reflecting (a) low variability in subjects' responses to the written attitude test within and between groups and (b) broad variability in subjects' responses to the DAF Test within and between groups.
The conclusions based on the findings of the study were that
(1) the two measuring tools used in this study (graphic and verbal)
measured different aspects of the concepts under study. It seemed
to the investigator that the written attitude test measured primarily
the conscious level of the subjects' concepts while the DAF Test seemed
to reveal primarily information about the unconscious level of the
subjects' concepts. (2) Subjects' responses to the DAF Test were in­
terpreted to demonstrate the positive effect of kibbutz lifestyle on
children's formation of the unconscious aspect of concepts of family
and of self within the family. (3) Subjects' responses on the written
attitude test were interpreted to demonstrate that the kibbutz life­
style did not seem to differ from the middle class suburb city life­
style in its affect upon the formation of the conscious level of the
concepts of family and of self within the family.

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CHAPTER I

INTRODUCTION

Statement of the Problem

Historically, the American culture has tended to favor keeping the young child in the home with his parents and under the immediate care of his mother. However, today's society is faced with a greater number of mothers who either have to go to work outside their homes and away from their children or those who wish to do so. Consequently, the traditional structure of public education has been questioned by educators, sociologists, and anthropologists. For example, the suggestion to establish day care centers in America has become a controversial issue. The main question here is whether or not a child's education outside the home starting at an early age is associated with damage to the child's later development. If indeed such practice proves to be harmful, then society might not encourage and support this practice. Various societies—especially the socialist and the communist ones—do encourage the development of day care centers in their attempts to find a solution to the working mother situation. The kibbutz society in Israel belongs to this category.

Kibbutz is a communal settlement in Israel (literal meaning—gathering). In one common usage, the term kibbutz refers to an alternative to the traditional family constellation and lifestyle, which approximately 4% of the population of Israel has chosen to adopt.
The kibbutz also represents an alternative to traditional patterns of parent-child role and child rearing methods. Typically, a kibbutz is a predominantly agricultural settlement of 400 to 1,000 inhabitants. It is a communal living arrangement which operates under a socialist philosophy. Except for a few personal belongings, all property is communally owned. The basic policy is to take from each according to his ability and to give to each according to his need, and the basic intent is to develop a classless society (Butehorn, 1973).

Economic structures and living arrangements within the kibbutz produce a family lifestyle which differs from that of the traditional Israeli families. Because the kibbutz provides economic support for all its members, economics is not among the major factors which bind families together. Rather, marriages are based more on emotional, sexual, and social ties. Traditional male and female roles blur, as each marital partner works eight hours per day and returns to a communally prepared meal (Butehorn, 1973).

Three important ways in which the kibbutz living arrangement differs from the traditional family structure are (a) families are not bound together by economic factors; (b) traditional male and female roles within the family are blurred; and (c) perhaps most importantly, children are raised in groups by various kibbutz members, thus the nature of parent-child association is different from the traditional parent-child association. Because family life in the kibbutz differs structurally from family life in the traditional nuclear family, it
would be expected that a kibbutz child's concept of a family would differ from the concept of family held by a child from a traditional home.

Personality theorists posit that characteristics of a child's family have a powerful effect upon the child's developing personality. One aspect of the human personality which many theorists consider to be an important construct is the self-concept. The self-concept has been defined as follows:

Of all the perceptions existing for an individual, none are so important as those he has about himself. Each of us has thousands of ways in which we see ourselves, and each of these has more or less importance in a given personal economy. These thousands of ways make up the particular organization which seems to each to be his very self. It is this organization of ways of seeing one's self that the modern psychologist calls the self-concept (Combs, 1962, p. 42).

Combs goes on to say that the self-concept "represents the most important single influence affecting an individual's behavior" (1962).

A number of authors have hypothesized that the nature of one's self-concept is determined by the relationships which one has with others (Combs, 1962; Kelley, 1962; Rogers, 1951). Therefore, structural differences between the kibbutz family and the traditional family would be expected to influence the types of interpersonal relationships which children in each setting experience in relation to their parents, to other adults, and to their peers. Thus, since living arrangements probably influence interpersonal relationships and since interpersonal relationships are hypothesized to affect self-concept, the hypothesis may be deduced that children raised in kibbutzim would differ from
children raised in traditional families in terms of their concept of themselves within the family.

Two general topics were addressed by this research project. They were (a) the effects of kibbutz lifestyle on children's concepts of a family, and (b) the effects of kibbutz lifestyle on children's perceptions of self as it relates to the family.

**Rationale**

Experts have often declared that the kibbutz provides an excellent opportunity for studying the effects of variations in family structure on the individual personality. For example, Bettelheim has stated that both science and mankind have much to learn from the kibbutz experiment (Bettelheim, 1968). More specifically, in kibbutzim it is possible for a researcher to examine, in a naturalistic setting, the effects of a different family structure on various aspects of the child's development. Rapaport (1958) has averred, "The upbringing of children in the collective in Israel is for the social scientist what an experiment of nature is for the natural scientist" (p. 78).

Talmon (1972) explained that kibbutzim are small-scale and cohesive communities that can be grasped in their totality as coherent social systems. The family may be studied in its intricate interactions with other institutions and the data on it are amenable to rigorous structural and ideological analysis. Talmon suggests that a study of the kibbutz may thus help to shed some light on the position of the family in revolutionary and collectivist societies elsewhere.
Rabin (1968) suggested that research into the emotional well-being of kibbutz children can make a particularly important contribution to scientific knowledge, in light of the traditional Western view of the parent-child relationship. At the time when the kibbutz experiment was in its infancy, child development experts in the United States generally agreed that if a child were to be removed from the parental embrace of the traditional nuclear family, he or she could not grow and thrive (Butehorn, 1973). For example, Bowlby (1951), in a definitive review of the literature written about this topic, concluded that it is essential for a child's mental health to experience a warm, intimate, continuous relationship with his or her mother. A commonly cited study in support of this position was that performed by Spitz (1945), who found that children receiving institutional nursing care fared far more poorly in terms of intellectual, emotional, and physical development than children who received more intensive maternal care. If it can be demonstrated that kibbutz children who are exposed to multiple mothering, which means that their various needs are taken care of by different people, compare favorably with their counterparts from traditional families in terms of development, the notion that collective child rearing is inherently detrimental to children's welfare must be questioned.

In a more general sense, it has been suggested that the study of the kibbutzim can isolate, in a naturalistic setting, crucial aspects of child rearing and education. This could provide insights which would lead to improved child-rearing practices and more effective education (Bettelheim, 1968; Butehorn, 1973). Insights into the effects
of various family structures on the child's development may have im-
plications for the rearing of American children. Bettelheim (1968) has suggested that in the kibbutz system of education, a solution may be found to the problems of repression and alienation which plague American efforts to educate minorities.

Emotional development and education are intimately related in that self-concept affects learning, development, and behavior (Combs, 1962). Thus, increased knowledge regarding the effects of kibbutz versus traditional family living on some aspects of self-concept, such as will be provided by this research project, may have relevance for the field of education.

In the past, researchers' efforts to investigate the effects of the kibbutz on child development have been marred by four types of methodological errors. In this study, attempts were made to avoid these errors. First, much of the research in this area has been conducted by individuals who are not thoroughly familiar with Israeli culture. As a result, research conclusions have been based on various cultural expectations and biases. Bettelheim (1968) was aware of this problem, but he failed to heed his own warning. Rabin (1968) has also noted the need for the researcher to examine and control his or her own cultural biases about community structure, human relationships, economics, and child rearing in order to objectively assess the pros and cons of kibbutz living. The present study was conducted by an individual who was raised in a kibbutz, but the study was also supervised by individuals from the United States. It was hoped that the resulting cross-cultural interaction minimized cultural misunderstandings.
Second, when studying the effects of kibbutz living, the tendency has been for researchers to use measurement devices which are either culturally biased (based on American culture) or not adapted to the language used in the kibbutz. These pitfalls were avoided in this study, in that (a) one of the measurement techniques to be used, the Draw-A-Family Test, is a graphic, language-free instrument, which is relatively unaffected by cultural biases (Dileo, 1973); and (b) the other measuring instrument used was specially designed for use in the Israeli culture. (See the section on Measures for more information regarding these tests.)

Some researchers, the most notable of whom is Bettelheim (1958), have based their conclusions about the kibbutz on anecdotal data (Bronfenbrenner, 1973). As was noted by Schwartz (1958), a more objective and more valid approach is to employ tests to assess outcomes. This approach has been tried by Rabin (1969), Talmon (1972), and others. This study will use this latter approach.

The final methodological issue involves the use of a comparison group. Bettelheim has attempted to draw conclusions about the effects of the kibbutz arrangement on child development without comparing kibbutz children with any other group of children. Spiro used the same approach in his earlier work (1958). According to Bronfenbrenner (1973) in this type of research, one cannot be certain that characteristics of kibbutz children, which are supposedly produced by the kibbutz experience, do not also exist in children raised in traditional families. Another research error would be to compare kibbutz children with children from American families without first investigating the ways in which kibbutz children differ from children of traditional Israeli...
families. This error must be avoided in order to separate specific effects of the kibbutz arrangement from general cultural effects. Recent research about kibbutzim has been designed to avoid such mistakes (Rabin, 1971). As was suggested by Schwartz (1958), the present study was an attempt to assess the influence of the kibbutz living on self-concept as it relates to the family and concept of family by comparing kibbutz children with a comparison group of children from traditional Israeli families.

**Hypothesis Statement**

In order to accomplish the study's purposes, the following hypotheses were investigated:

1. There will be no significant differences between kibbutz children's concept of family as measured by their Draw-A-Family Test and middle class city children's concept of family as measured by their Draw-A-Family Test.

2. There will be no significant differences between kibbutz children's concept of self within the family as measured by their Draw-A-Family Test and middle class city children's concept of self within the family as measured by their Draw-A-Family Test.

3. There will be no significant differences between kibbutz children's concept of self within the family and middle class city children's concept of self within the family on responses to a written attitude test measuring concept of self within the family.

4. There will be no significant differences between kibbutz children's concept of self and middle class city children's concept of self on responses to a written attitude test measuring concept of self.
Definition of Terms

Kibbutz--a small, self-governed socialist community in Israel.
Kibbutzim--the plural of kibbutz.
Kvutza--a social and education age group to which a kibbutz child belongs.
The Children's House--the building in which a peer group lives, studies, sleeps, etc.
Caregivers--various kibbutz members assigned to take care of the kibbutz child.
Metapelet--an assigned educator who is responsible for the well-being of the individual kibbutz child and his kvutza for any length of time.
Metaplot--the plural of metapelet.
Moshav--cooperative settlement in Israel. Joint consumer and marketing cooperative with allowances for private ownership.
Self-concept--the individual appraisal or evaluation of one's self.
Concept of Family--the individual's appraisal or evaluation of his family.
The Draw-A-Man Test--a figure drawing test used to evaluate children's cognitive stage of development as well as their intellectual maturity. The test was developed by F. Goodenough. Later, it was revised and validated by D. B. Harris.

Limitations

The researcher's study was limited to a particular kibbutz community
and to a particular middle class suburb community in Israel. Even though all kibbutzim operate basically in the same way, still each individual kibbutz community differs to some extent from other kibbutzim. This fact plus the very small sample group and the restricted range of age group made this research valuable only as an initial introductory study, rather than an inferential one. It is also acknowledged that there are many intervening variables involved in how and why a child perceives himself and his family the way he or she does.

It was the intent of this study to determine the overall effect of kibbutz lifestyle on the formation of concepts of family and of self within the family in kibbutz children. However, it is possible that variables other than the ones discussed in this study affected the formation of the concepts under study.

As a result of intervention by the school's principal in the city community, much of the desired more-detailed information about the subjects was withheld from the researcher, such as information regarding the subject's ethnic background and/or the parents' origin.

Also, the small sample used in the study did not allow the researcher to break the groups into subgroups (such as boys and girls) in its statistical analysis.

The researcher attempted to incorporate in the written attitude test the most appropriate terms for both subject groups. However, in translating those questions to the English language, there is a possibility that some of the nuances of specific words are lost.
CHAPTER II

REVIEW OF LITERATURE

The review of literature encompasses the following areas: a brief review dealing with the impact of culture and of family structure on the formation of self-concept, and a brief review of major research findings dealing with child growth in the kibbutz as compared with the development of city children.

PART A

A Brief Review Dealing with the Impact of Culture and of Family Structure on the Formation of Self-Concept

The Impact of Culture on Formation of Self-Concept

Honigmann (1967) defines culture by saying, "A culture is the way of life followed by a human collectivity, and a personality is the style of life grounded in a person--either an actual individual or a cross-section of persons." (p. 32).

The correlation between cultural press and the formation of personal values and concepts was demonstrated very clearly by Dennis (1966). According to Dennis' findings, the drawings of a man by a child do not merely mirror the environment, rather, they reflect values or preferences of the drawer which are transmitted to the child by his social environment. However, Dennis pointed out that children's drawings reflect only values which can be represented graphically.

The impact of culture including the value system and social structure upon children's formation of family concept and concept of self
within the family has been demonstrated by Tal (1974). Tal compared the results of the Draw-A-Family and the Draw-A-House Tests of middle class city children in Utah and children from the Eskdale community in Utah. The Eskdale community practiced a very unique lifestyle and held different values than those held by middle class city people in Utah. The drawings of both groups of children who participated in the study reflected those differences.

The Impact of Family on Development of Self-Concept

Many researchers (Ainsworth, 1962; Montagu, 1973) who studied young children hold that a child should not be viewed in isolation from the family. Regardless of whether it is a biological, surrogate, artificial, or even a fantasy family; for the child, it is a transcendent reality that profoundly affects self-image and interaction with the human and animated environment.

As a child grows older, interest and feelings are extended to include people outside the family circle. Outside factors become increasingly influential in shaping attitudes and behavior, but the family or the lack of it, continues to be the basic, most determining influence. (DiLeo, 1973, p. 24)
PART B

A Review of Major Research Findings Dealing with Child Growth in the Kibbutz as Compared with the Development of City Children

Kibbutz Community

Kibbutz is a community striving for economic independence, the establishment of democratic social structure, with equal opportunities to all its members (Rabin, 1968).

The structure of existing kibbutz and its policy are the results of its basic premises. The achievement of kibbutz movement can be fully appreciated if contrasted with the lifestyle and achievements of other social structures in the Middle East and in Israel (Bettelheim, 1968).

Usually, a kibbutz is a relatively small agriculturally based settlement with some industrial elements in its economy. The average size of a kibbutz community ranges between 400 and 1,000 inhabitants. Each kibbutz community operates as one economical, cultural, and social unit. Overall, it runs as a single, big household. All property belongs to the community except for some small personal belongings. The individual family unit in the kibbutz is governed, supported, and protected to a large extent (economically, culturally, and socially) by the kibbutz organization.

The kibbutz organization provides all services and necessities including education to its members.

While in the children's house, each child lives with his peers. They all belong to a "kvutza" (group). The children in each kvutza do not just live in the same house but also study in the same class.
They dine together in the kvutza dining room, use the same shower facilities, recreational facilities, and share bedrooms with other kvutza members. The kvutza functions as the central learning unit and central social unit in the life of kibbutz children. Each individual kvutza operates like a small democratic unit. It makes its own decisions, evaluates members' behaviors if needed, chooses its representatives for the school community, works together in and around the kvutza house, and shares all through the growing years a wide range of activities, responsibilities, and experiences. According to kibbutz educators (Gerson, 1978), school-age children in the kibbutz society are encouraged to exercise the democratic way of living with its patterns of decision making, sharing responsibilities, and realizing the need to achieve balance between communal needs and personal needs.

In recent years, some kibbutzim established more traditional living arrangements for their families. In such kibbutzim, children sleep at night in their parents' quarters rather than in the children's houses. However, this specific study dealt only with children from kibbutzim in which children sleep at night in children's quarters.

The Effects of the Kibbutz Family Lifestyle on Kibbutz Children and Their Perception of Family

Existing research findings dealing with the impact of family life within the kibbutz society exhibit conflicting conclusions (Gerson, 1978). Gerson (1978) suggested that because of the lack of economic ties within the family, the family role of emotional support was enhanced. For example, he found in the kibbutz family a more extreme
development of the partnership trend because (a) the kibbutz family is not an economic unit, (b) professionals participate with parents in the education of the children, and (c) there is a sharing in home responsibilities and decision making. Therefore, Gerson concluded that the kibbutz family is based mostly on affectional and emotional ties.

Talmon (1964) suggested that in parent-child relations in a kibbutz there is extreme limitation of family functions in the sphere of maintenance and socialization of children. However, Talmon maintained that this has not led to disruption of family solidarity and that the curtailment of obligations has reinforced rather than weakened parent-child relationships and has enhanced emotional ties. Talmon continued to say that in the sphere of kibbutz' child care, there is considerably more cooperation and interchangeability than in traditional family structure. As she explained it, this is clearly the effect of the kibbutz' system of socialization. Since parents do not carry the main responsibility for either maintenance or socialization of their children, the emphasis is put on affective ties. From her observations of family life in a kibbutz, Talmon concluded that kibbutz parents emphasize the unity of the family and promote closer contacts among siblings. According to her, it is mainly within the family that both parents and children have intimate relations which are largely unpatterned by their positions in their age group at the kibbutz.

Dealing with attitudes of kibbutz children toward family and parents, Rabin (1959) administered a sentence completion test to kibbutz children and nonkibbutz children between the ages of 9 and 11. Study results showed:
1. More kibbutz children showed clearly positive attitudes toward the family than did nonkibbutz children.

2. Kibbutz children showed positive attitudes toward the parent of the opposite sex less frequently than did nonkibbutz children.

Other researchers found evidence which contradict the above mentioned findings. Kugelmass and Benznitz (1966) studied the perception of parents by kibbutz adolescents. The results of their study indicated that kibbutz children view the parent from the same sex as more "instrumental," while the opposite-sex parent was viewed as more "expressive." This particular view of parent function was interpreted by the researchers as resulting from the lifestyle and family roles in the kibbutz society.

In a comparative study, Levin (1967) found among other things that: (a) kibbutz children used the adults' yardstick of words less than city children; (b) city children clung much more strongly to the values of the adults in their world; (c) teacher image in the city was less personal, less friendly than in the kibbutz; and (d) kibbutz children were less influenced by the adults in their life.

Other researchers (Bettelheim, 1968; Halpern, 1962) suggested that the lack of economic ties in the kibbutz family caused kibbutz children to shift their needs for emotional support and their need to belong from the family unit to other elements in their lives.

According to Bettelheim (1968), because of children's pattern of life in the kibbutz, the kibbutz child is convinced there is no permanence in human relations except with his age group. Individuals are unreliable, while the community and the group are. For Bettelheim,
the basic security of kibbutz children was provided not by their parents but by the kibbutz. First in importance in their lives is the peer group, then the kibbutz itself, and only then the parents.

Bettelheim (1968) also suggested that the kibbutz child feels closer to his own age group than to his natural siblings and that he is going through a process of forming an attachment to the peer group instead of adults. Therefore, Bettelheim's conclusion was that the kibbutz child is a "peer group" directed person rather than a parent directed person. Bettelheim continued to suggest that there are rudiments of intimacy in the kibbutz, and a desire for it, but that it is weaker than in the middle class family. According to Bettelheim, even in a situation where parents' relations with each other and with their children are emotionally deep, the child realizes that his parents' primary allegiance is to the kibbutz, and that family ties are secondary in importance. Bettelheim pointed out that as a result of this, kibbutz children identify from an early age with the society "culture carrier" (such as the child's metapelet) not with their parents.

Bettelheim (1968) also made some speculations regarding an alleged incapacity for intimacy, emotional "flatness" and lack of responsiveness, lack of flexibility, and lack of independent action on the part of the kibbutz-reared adolescent and adult.

While discussing the criticism of communal education, Leon (1969) suggested that some of the criticisms of kibbutz education would be better founded if family life outside the kibbutz were always an idyll, if all parents were, in the nature of things, equally capable of bringing up their children to perfection. In reality this is unfortunately
far from the truth. In fact, the kibbutz system would seem to serve
the interests not only of the children, but of both "better" and "worse"
parents.

In his article, "Behavior Research in Collective Settlements in
Israel," Schwartz (1958) suggested that in order to make a more ob-
jective evaluation of kibbutz society, the traditional ethnographic
procedures are not sufficient, as there may be a tendency to see in
the kibbutz a substitution of social for economic inequality based on
Western-oriented values. Schwartz proposed the use of comparison of
data collected in a kibbutz with data collected in other social struc-
tures in Israel, not with American or Western society. According to
Schwartz, the use of quantitative techniques is particularly valuable
in comparison and in the maintenance of objectivity.

Rabin (1971) suggested that when dealing with the pros and cons
of kibbutz structure and kibbutz education, researchers should re-
examine and re-evaluate some of their cherished notions concerning
community structure, human relationships, economics, and child rearing.

In conclusion, the research findings dealing with a child's de-
velopment in a kibbutz are somewhat equivocal. It seems that most
American researchers did not objectively represent kibbutz education,
as they failed to grasp basic views held by kibbutz people and kib-
butz children. The testing instruments used by them were not adapted
precisely to the language of kibbutz people. The conclusions of such
studies are rooted in American culture and its expectations rather
than the kibbutz culture.
The Effect of Multiple Mothering on Kibbutz Children

An overall view of existing research about kibbutz life and especially the impact of what has been termed by some as "multiple mothering" in the kibbutz also reveals a polarization of conclusions.

Pelled (1964), a long-time psychotherapist of emotionally disturbed kibbutz-born children and adults, found that the kibbutz mother serves as the "main object-relation" for the kibbutz child. Metaplot, educators, and other closely related adults are seen by the kibbutz child as objects in need-satisfying and "transient-interchangeable" relationships.

In his attempt to study the impact of multiple mothering in a kibbutz, Rabin (1965) used structured and projective techniques while comparing kibbutz-raised children with Moshav-raised children. Rabin's findings indicated that the exposure of kibbutz children to "partial maternal deprivation" did not handicap them nor interfere with healthy personality development. Rabin concluded that multiple mothering had no deleterious effects on the evolving personality. Rabin also suggested that kibbutz lifestyle allows for opportunities for closer affiliation and security and less feeling of alienation among kibbutz-reared youngsters which compared with those reared in the American society.

Golan (1961), the foremost pioneer and ideologist of kibbutz child rearing and education, suggested that being cared for by the metapelet since an early age did not cause the kibbutz child to be deprived maternally, in the commonly understood sense of the term. However, Golan pointed out that a sense of deprivation can be caused
by the metapelet's failure to consider individual differences among infants and young children and to spend more time directly with the children. Dealing with the same subject of multiple mothering, Yarrow (1961) concluded that there is no clear evidence that multiple mothering, without associated deprivation or stress, resulted in personality damage. On the other hand, Kaffman (1962), who did clinical observations on the emotional life of children in the kibbutzim, concluded that young kibbutz children look as though they are suffering from maternal deprivation.

Bettelheim (1968) concluded that the kibbutz system is successful in raising children in groups by other than their mothers. However, he attributed such success to the fact that those children were brought up in a relatively small society where a high degree of consensus exists, where lifestyle and property rights are equal, and where the entire society functions like an extended family.

In summary, the review of literature in this area shows considerable differences of opinion and conclusions. The researcher suggests that this can be partly explained as a result of cultural differences among researchers and between researchers and kibbutz people.
CHAPTER III

METHOD AND PROCEDURE

Method

The method used in this study involved comparing the Draw-A-Family Test of two different groups of children living in two different Israeli social systems—kibbutz versus middle class (see description on pp. 27-32); the two social systems were the independent variables. The DAF was used in order to gain insight into the children's interpretation of the concepts of (a) the family and (b) the self (the child) as a part of the family unit—the dependent variables.

A written attitude test which deals with the child's concepts of (a) family and (b) self within the family was also used as a dependent variable. The written attitude test was constructed as (a) a possible validating device for the results based on graphic expression and (b) to gain broader understanding of the subjects' concepts under study.

Procedure

Sample Selection

A list was made by the researcher of all kibbutzim which fall into a specific category such as medium-size kibbutzim, kibbutzim in which sleeping arrangements require children to sleep in children's houses, kibbutzim in which the third- or fourth-grade teachers are kibbutz members who know the children's background and their family. Because of the possible impact of the kibbutz economical status and
source of income, the researcher selected subjects from kibbutzim which can be categorized as average in their income in relation to other kibbutzim and which are economically based on farming and industry. The listed kibbutzim had to be located geographically close to a small suburb city community which would fit the needs of the study (pp. 29-31).

Letters requesting permission to run the study were mailed to the educational authorities in the specific kibbutzim and adjoining middle class suburb communities which were found fit for the study.

Of those kibbutzim and communities which agreed to participate in the study as designed, one kibbutz and its neighboring middle class suburb community were selected. The two communities were selected by the researcher as they best fit the category requested for this study.

Preparation

With the help of both kibbutz educators and American researchers, the written attitude test was constructed to add further information to the study.

As a consequence of a concern over possible contamination caused by linguistic misunderstandings, the written attitude test was field tested by the investigator in a kibbutz other than the one chosen for this study. In applying the pretest, the researcher attempted to verify subjects' complete understandings of the test's questions. Small groups of kibbutz and city children from third and fourth grades (N = 30) were asked to look at the test and to respond to it. The tester and the subjects' teacher encouraged the subjects to openly express their understanding of the questions and/or specific words in the questions.
Arrangements were made to have all needed materials and equipment on hand at the time of testing. The researcher attempted to conduct each session in an open and friendly atmosphere.

The test which was used in the pretesting sessions was revised by the researcher according to the findings derived from the subjects' comments.

Actual Testing

In both of the participant communities, the same procedure was followed: Class teachers were briefed by the researcher about the objectives of the study and their role in it.

The physical condition of the chosen classrooms was inspected by the researcher. They included considerations for seating arrangements, a chalkboard, and an adjoining room for individual conferences.

Arrangements were made for two separate class meetings for each of the participating groups. All third- and fourth-grade students in the city school and all third- and fourth-grade students in the kibbutz school, present the day of the testing in class, participated in the study. The researcher presented the tests first to the kibbutz children.

First meeting. Subjects were placed in a designated classroom and seated in such a way that there was enough distance between subjects, so that copying would be minimized.

Both teacher and tester were present in the classroom at the time of test administration.

Each subject received a standardized white sheet of drawing paper, a box of colored crayons, a pencil, and an eraser.
The subjects were instructed to draw a picture of their family. Instructions were given in a warm and encouraging tone, using the following instructions:

"You are going to participate in a drawing project. Feel free to use the crayons and the pencils as you wish. The subject of today's art project is 'My Family'—meaning your own family. When you are finished, put your name on your paper and bring it to me."

In order to emphasize the importance of subject matter, the tester wrote it on the class board so that all the participants were able to see it clearly.

Both subject groups reacted positively to the drawing assignment. The only concern voiced by some children was in regard to their drawing ability or their artistic talents. In response to such concerns, the investigator assured all concerned subjects that the aesthetic quality of the drawing was not important in this case.

After finishing the drawing, each child was asked to take his or her drawing to an adjoining room where the tester was seated. This step was conducted in a separate room in order to avoid test contamination. The child was asked to identify the various figures drawn by him. He or she was also encouraged to discuss specific elements in the drawing. During this time, the class teacher remained in the classroom. He saw to it that the tester received one child at a time and that the class was in order. All together, the first session with each one of the participating groups lasted approximately 60 minutes. Due to limitations resulting from the school schedules of both schools participating in the study, the second session took place on the following day.
Second meeting. Once again, the subjects were placed in the same designated classroom and seated in such a way that there was distance between subjects. Each subject received a pencil with eraser and the written attitude test containing self-concept and family perception items. The students were asked to answer the questions on these tests. While introducing the test, the tester emphasized the importance of honesty and she stressed the fact that there were no right nor wrong answers in this study. The written attitude test was administered by the researcher. Shortly after starting to answer the test, some children requested permission for a second answer on some questions. The researcher's immediate reaction in the first session (with the kibbutz children) was to say, "no." However, the children's reaction to the restriction and the researcher's recognition of the possible loss of information in such a case influenced her decision. The subjects were allowed to give a second choice answer only in cases where they did not feel that one answer expressed their true feelings in regard to the question's content. The subjects were instructed by the researcher to mark the first choice with number 1 and the second choice by number 2. The completed forms were collected by the researcher after the subjects finished answering.

In the meantime, the teacher from each participating class was handed a supplementary questionnaire about the subjects and their families (see Appendix C). The teacher was responsible for filling it out correctly.

All materials related to the study were collected by the researcher at the end of the session. The researcher met with the groups' teachers in an informal setting. She asked them for information relating to
individual students and their responses on both tests. The teachers were asked to give their own opinion of the tools which best reflected the child's relations to his family, as viewed by the teacher.

Finally, all materials produced by children who did not fall in the category described on pages 31-32 were pulled out. The rest of the materials were used later on in the study.

Description of the Social Groups Selected for This Study

The two social groups from which subjects were chosen were (a) a specific kibbutz community in Israel and (b) a specific middle class suburb community in Israel.

In each of the communities that were chosen, the family living patterns were different as a consequence of different social structures and living arrangements.

Kibbutz community. Kibbutz is a community striving for economic independence, the establishment of democratic social structure, with equal opportunities to all its members (Rabin, 1968).

The structure of existing kibbutz and its policy are the results of its basic premises. The achievement of kibbutz movement can be fully appreciated if contrasted with the lifestyle and achievements of other social structures in the Middle East and in Israel (Bettelheim, 1968).

Usually, a kibbutz is a relatively small agriculturally based settlement with some industrial elements in its economy. The average size of a kibbutz community ranges between 400 and 1,000 inhabitants. Each kibbutz community operates as one economical, cultural and social unit. Overall, it runs as a single, big household. All property belongs
to the community except for some small personal belongings. The individual family unit in the kibbutz is governed, supported, and protected to a large extent (economically, culturally, and socially) by the kibbutz organization.

The kibbutz organization provides all services and necessities including education to its members. Ideally, all kibbutz members participate in the process of kibbutz decision making, as the kibbutz policy and its major decisions are made in the general assembly attended by all members.

According to kibbutz members (Talmon, 1972), the aspect of family life and the emotional ties of the family members are very important to kibbutz members. However, the lifestyle of the kibbutz family differs greatly from the lifestyle of a city family in Israel. All kibbutz families are given a housing unit. This unit, which is called hader (room), is the parents' home. In most kibbutzim, the children live from birth to age 18 with their age group. They reside in children's homes, not with their family. However, in the evenings and afternoons, as well as holidays and weekends, they go to the hader which is considered by them as their parents' quarters but also as the family meeting place and the center for family activities.

During most of the day hours throughout the years, the kibbutz children are cared for directly by the group's metapelet, the teacher, and other assigned caregivers other than the parents. Education, economic necessities, health care, and cultural stimulation are provided to the children mainly by the kibbutz organization, not by their immediate family.
While in the children's house, each child lives with his peers. They all belong to a kvutza (group). The children in each kvutza do not just live in the same house but also study in the same class. They dine together in the kvutza dining room, use the same shower facilities, recreational facilities, and share bedrooms with other kvutza members. The kvutza functions as the central learning unit and central social unit in the life of kibbutz children. Each individual kvutza operates like a small democratic unit. It makes its own decisions, evaluates members' behaviors if needed, chooses its representatives for the school community, works together in and around the kvutza house, and shares all through the growing years a wide range of activities, responsibilities, and experiences. According to kibbutz educators (Gerson, 1966), school-age children in the kibbutz society are encouraged to exercise the democratic way of living with its patterns of decision making, sharing responsibilities, and realizing the need to achieve balance between communal needs and personal needs.

In recent years, some kibbutzim established more traditional living arrangements for their families. In such kibbutzim, children sleep at night in their parents' quarters rather than in the children's houses. However, this specific study dealt only with children from kibbutzim in which children sleep at night in children's quarters.

City community. The specific suburb city community from which subjects were chosen for this study is geographically located in the same area as the kibbutz community which was selected for this study. This city community was founded in 1961. Its founders came from established settlements in various places in Israel. People in the
community vary in their income and their occupations. As with most middle class Israeli families, here too, large numbers of wives and mothers are working outside the home. Many workers commute daily to the adjoining city where they work. Today, there are approximately 3,000 people in this place; 70% of the population are Israeli born, 10% are immigrant Jews from the Arabic countries, and 20% are immigrants from Europe or the United States. Considering its dry, desert climate, the suburb looks green, cared for, and inviting. There are no high-rise buildings in the community. Each family has its own house with its own garden or yard. The community is constantly developing as more and more people choose to escape the lifestyle of the urban city and to live in a community such as this one. Children from families living in the community study in the local school which is governed by the government's office of education. Throughout the years, the community developed its own recreational places, commercial centers, and enrichment programs. The people of the community and their children use those facilities or programs. According to various school teachers and community members, family lifestyle in this community is not different than that which is practiced by families in the big city. The main difference between the two is that this community allows its members and their children to enjoy the pleasures of nature, spacious environment, farming atmosphere, and the belonging to a smaller, more intimate and caring community.

The main reasons for using this particular community in the study were:

1. Educators' and school administrators' agreement to cooperate in the study.
2. The geographic location—closeness to the participating kibbutz community; and the use of the same regional educational and governmental facilities.

3. The similarities in the origins of the populations.

4. The community's unique achievement of creating a communal feeling among its members.

5. The relatively small size of the community (in comparison to other communities of this category).

6. The structure of the community—volunteer work.

7. The housing arrangement.

8. The function of the elementary school within the community (one elementary school serves the whole community).

9. The affiliation of the community school to the same public school system which served the kibbutz community.

Subjects

The accessible population from which the final sample was drawn was (a) all 9- to 10-year-old children who lived in middle-size Israeli kibbutzim (400 to 700 members) in which children's living arrangements required all children to sleep at night in the kvutza's home and (b) all 9- to 10-year-old children who lived in middle class suburbia neighborhoods in a Jewish Israeli community that has developed a definite local atmosphere and which encouraged citizens' feelings of belonging to the community.

The sample for the study was drawn from a kibbutz and a suburb which were geographically close to each other and which resembled each other in as many ways as possible.
The sample consisted of all subjects in third and fourth grades of the two communities' schools. Only drawings and written answers made by children who lived with both their natural parents were used in the study. In addition to these restrictions, from the kibbutz group only responses of children who lived all their lives in the particular kibbutz were used in the study.

From the city group, only responses of children who lived all their lives in the particular community were used in the study.

Realizing the possible impact of ethnic background on the subjects' concepts of self and family, the researcher tried to collect data which included information regarding the child's ethnic background. However, this attempt failed. Even though the kibbutz people were willing to offer this information, the researcher was not granted permission to collect this data in the city.

All responses of qualified subjects were included in the study. From the city group, 24 subjects (12 boys and 12 girls) were found fit to participate in the study, and 27 kibbutz children (13 boys and 14 girls) were found fit to participate in the study.

Measuring Instruments and Statistical Analysis

Measuring Instruments

The DAF was used in this study as its central testing device. It was utilized by the investigator of this study as a projective, nonverbal instrument. It was suspected by the investigator of this study that the DAF test can be used to reflect the emotional-unconscious level of the child's concepts of family and self within the family. The written attitude test was used as a secondary testing device. It was suspected by
the investigator of this study that as a verbal tool, the written attitude test could be used to reflect the more cognitive-conscience-exteriorly restricted aspect of the child's concepts of family and self within the family.

As each of the two testing devices required different kinds of response from the subjects, it was hoped that both tests would allow the investigator to gain broader information about the subjects under study in regard to their concepts of family and self within the family.

The Theoretical Basis for Figure Drawing as a Projection of the Self

The Draw-A-Family Test evolved from the Draw-A-Person Test, and it is based more or less on the same rationale and interpretational principles of the latter.

The developers of the Draw-A-Family Test (Koppitz, 1968; DiLeo, 1970; Burns & Kaufman, 1972) suggested that a review of findings resulting from evaluation of the Draw-A-Person Test are relevant to a discussion about the Draw-A-Family Test and its analysis. This statement was especially important for this study because the Draw-A-Family Test was used as a projective tool for the concepts observed.

The idea that human figure drawings are useful for the study of personality is rooted in self-image psychology as well as in the psychoanalytic theory of projection.

Snygg and Combs (1949) presented one of the more systematic psychological self-image theories. They maintained that it is the world as it is presented to the psychological self (sometimes called the phenomenological world) that is of value to psychology: it is only this subjective world that has psychological meaning and relevance.
Projective drawings are one technique with which this phenomenological world can be assessed. In the last 30 years, children's art, especially the Human Figure Drawings, has been used extensively by psychologists, educators, and therapists working with children (Alschuler, 1947; DiLeo, 1973; Rabin, 1957; to name a few). The purposes to which the observed drawings were put to use varied greatly. Three main approaches to the interpretation of children's Human Figure Drawings exist today.

The first position holds that the child's drawing is not so much a reflection of personality as it is a consequence of the level of conceptual maturity that the child has attained. In this view, a child's drawings reflect his ability to form concepts, thus they are an index of his intelligence and level of mental maturity. The most extensive work in this area was carried by Goodenough (1926), who developed the Draw-A-Man Test in order to detect the child's level of intellectual maturity. This test was later revised by Harris (1963) and is widely used today.

The second position regarding children's drawings was influenced by depth psychologists and rests upon the assumptions of a dynamic psychology. Here, children's drawings are used mainly as indicators of deep-seated personality dispositions. They are analyzed for signs of conflicts, unconscious needs, and personal traits—some of which cannot be expressed by other means of interpersonal interaction. As a result of extensive observations, research, and clinical work, this second group of educators, psychologists, and therapists demonstrated the possible use of art as a road through which the child's private life may be
interpreted and understood (Bender, 1937; Buck, 1948; DiLeo, 1973; Hammer, 1958; Lowenfeld, 1952; & Machover, 1949).

One of the most dominant researchers in this group was Machover (1949). She hypothesized that "all creative activity bears the specific stamps of conflict and needs pressing upon the individual who is creating" (p. 25). Machover (1949) established the use of the Draw-A-Person Test not just as an indicator of emotional maturity as suggested by Goodenough, but rather as an indicator of the intimate personality of the individual who was doing the drawing.

The third and most recently developed position in regard to the Draw-A-Figure Test was developed mainly by Koppitz (1968). Koppitz emphasized the critical role of the significant other on the child's life and on the formation of the child's self-concept. Koppitz' work was influenced greatly by Sullivan's Interpersonal Relationship Theory. Her main argument was that Human Figure Drawings of children can reflect both their maturity level and their emotions. However, she maintained that a separate test should be devised in order to deal with each of these aspects.

Koppitz devised a list of 38 signs in Human Figure Drawings (HFD) which were thought to reflect emotional problems. They were items selected from the work of Machover and Hammer as well as Koppitz' own clinical experience. The clinical validity of 30 emotional indicators out of the total 38 was established. Researchers were able to differentiate between the HFD of children with or without various emotional problems. It was found that emotional indicators occurred more often on HFDs of clinic patients than on drawings of well-adjusted children, and that individual HFDs of clinic patients showed a higher
incidence of emotional indicators than those of well-adjusted children. A look at Koppitz' findings show that some emotional indicators have greater diagnostic value than others. However, Koppitz emphasized that a single sign on an HFD cannot be used as the only indicator of emotional problems. Rather, in order to arrive at a meaningful evaluation of the child's emotional state, the total drawing should be evaluated. This approach to the clinical use of child's art was used in this study. One of the variables in this study is the evaluation of the drawing of each child in an attempt to understand the overall feeling projected by the drawing.

Cohen, Mony, and Whlenhuth (1972) reported that various validation studies by Fuller, Freuss, and Hawkins (1970); Hall and Larier (1970); and Starn and Marcuse (1969) have confirmed many of Koppitz' hypotheses about the role of emotional indicators in the HFD of children.

The Draw-A-Person Test as a Reflection of Self-Concept

A question arises as to whether the Draw-A-Person Test reflects the child's ideal self or his attempt to portray his external body image instead of his self-concept. In a study designed to investigate Machover's self-image hypothesis, Craddick (1963) compared the figure drawings in the Draw-A-Person Test with the figures drawn in the self-portrait. Craddick's evidence supported Machover's hypothesis. Both drawings were significantly related in terms of size, sex, and placement on the page.

More work in this specific field was done by McElhaney (1969). In his study, McElhaney provided evidence supportive of the assumption
that the HFD Test revealed the patient's self-concept, his contact with reality, and the type of defenses that he was using. McElhaney also demonstrated that this particular test revealed both the patient's unconscious and conscious self-concept.

Dealing with this very same aspect of children's drawings, Koppitz (1968) emphasized that "how a child draws a figure, regardless of whom he draws, reflects his own self-concept" (p. 75). Koppitz maintained this aspect of child's art to be valid for all HFDs drawn by 5- to 12-year-old children.

In this study, Koppitz' approach of using children's drawings of their family as a projective tool for their concept of self will be used. Some of the validated emotional indicators she used and which gained further support in following research by DiLeo (1973) and by Burns and Kaufman (1972) will also be used in this study.

The Draw-A-Family Test (DAF)

The DAF Test is a test in which a child is asked to draw a picture of his family. The child's drawing is later examined and analyzed by an expert who is looking at (a) the total impression the drawing reflects and (b) specific features in the drawing which he attempts to interpret according to an established code of interpretation.

The Draw-A-Family technique is not new. A number of clinicians have written about it. The earliest report found in the literature on the DAF Test is that by Hulse (1951). Further investigation of the subject was done by Reznikoff and Reznikoff (1956) and by Shern and Russell (1969). Burns and Kaufman (1972), DiLeo (1973), Hammer
(1958), and Koppitz (1968) further developed the basic DAF technique. Their comprehensive books presented a detailed discussion of the rationale behind the test and the methods of presenting it and analyzing the drawings.

The justification for the use of the DAF technique rests upon two assumptions:

1. The unconscious speaks through symbols (Jung, 1948; Freud, 1944).

2. Young children draw what is important to them and their drawings are colored by their feelings and emotions (Eng, 1931, Norway; Piaget, 1971, Switzerland; Piotrowsky, 1941, Poland; and Spearing, 1912, England).

After years of intensive research in the field of children's drawings, Machover (1949) concluded that the art of young children expresses inner realism, not visual realism.

DiLeo (1973) pointed out that a child's drawings make a statement more about the child himself and less about the object drawn.

Burns and Kaufman (1973) have suggested that family drawings reveal a child's attitude toward other members of his family and his perception of his own role within the family. From their clinical observation of children and their drawings, they concluded that family relationships are expressed by various elements in children's drawings. For example, they found placement of family members and closeness to family members signs for communication to indicate the child's perception of those members.
DiLeo (1973) held that when a child is well adjusted and free from anxiety, his intellect is free and his representation of the human figure represents a scheme in which the self is included and absorbed. This interpretation adds validity to the diagnostic use of drawings by children who have emotional problems or the diagnostic use of emotional aspects in the child's life as reflected in his drawings.

The family forms the earliest and most persistent influence in the life of the young child. The DAF Test then may serve a very important purpose, as it allows the child to express feelings related to central issues in his world. The trained observer can use the drawings as a one-way mirror through which he is able to gain insight into the child's inner view of the world (DiLeo, 1973).

In discussing the basic differences between the Draw-A-Family technique and the Draw-A-Person technique, DiLeo pointed out that the Draw-A-Person Test is scored quantitatively, while the Draw-A-Family Test is primarily qualitative. According to DiLeo, the reason for the different scoring systems lies in the basic difference in the child's response to the two tests.

DiLeo found that most of the child's body image as presented graphically is a predominantly cognitive response. However, DiLeo observed that when a child is asked to draw his family, his responses will tend to be colored by affective elements such as feelings and attitudes. The resulting graphic product is therefore a subjective portrayal rather than an objective one. It is this highly affective
tendency reflected in the family drawings that makes it less valuable as an indicator of intelligence but confers upon its significance as an expression of the child's emotional life. Therefore, DiLeo suggested that the family drawing can be viewed as an unstructured projective technique that may reveal the child's feelings in relation to those whom he regards as most important and whose formative influence upon him is most powerful.

While discussing children's drawings as a projective tool, Machover explained that in the production of a drawing, there emerges out of the individual's total experiential background, a unique pattern of movement and idea. Its significance for personality stems from the fact that there are processes involved of personal selection out of the infinite pool of experience and imagery potentially available in combination with a dynamic organization of movement and perception. The end result of such a process is a personal statement. This is why Machover suggested that the DAF technique might be regarded as a projective technique which can be used to analyze drawings for signs of unconscious needs, conflicts, and personality traits.

It has been pointed out by DiLeo that the DAF technique is an especially useful projective tool during the child's latency period (roughly between 6 to 10 years). During these years, the child's graphic expression is still relatively free from the pressure to conform to adults' graphic standards.

All in all, it has been suggested that family drawings project the child's emotional conflicts and feelings related to his family and his place in the family. They are valuable in that they do not
depend upon the child's willingness or ability to verbally express his inner feelings. However, as pointed out by Koppitz (1968), valid appraisal of a child's drawing is not possible without taking into account the child's age, his developmental level, the stages of development in his graphic expression, and what is normative for various age groups.

More than that, when dealing with children's drawings of a family, one must keep in mind that the drawings do not tell all. It is a contribution, often an indispensable one, to our understanding of a problem which might not find verbal expression (Burns & Kaufman, 1973).

The DAF Test has the advantage of being easy to administer and relatively easy to interpret. It also has the advantage of being related to graphic self-expressive activities like the ones carried on frequently in the classroom. In addition, this test is not restricted by limited verbal ability or by the child's awareness of the meanings and implications of his graphic expressions. It is a projective tool which crosses cultural and linguistic barriers.

Summary of DAF Test Discussion

The present study was based upon the following assumptions drawn from the research cited above:

1. A child's drawings reflect the effect different factors have upon formation of the child's personality.

2. A child's drawings can be used in order to determine the effect which particular influential factors have on (a) the child's whole personality and (b) specific aspects of the child's personality.
3. Culture (to include living pattern and value system) is an influential factor in the life of the human child.

4. The influence of culture upon children may be reflected in children's drawings.

The primary purpose of the DAF Test was to help determine if any significant relationships existed between (a) certain lifestyles and family concepts of children reared in two specific lifestyles and (b) certain lifestyle and concepts of self formed in children that were reared in two specific lifestyles.

The analysis of the DAF Test included fourteen different observations. The items included in the observational guide were those items which various experienced researchers found safe for use. Various observations were designed to explore more specific detailed aspects of the child's concept of family. For example, Observations 3, 6, and 9 were designed to explore concept of self; while Observations 5, 8, and 11 were designed to explore concept of mother; and Observations 4, 7, and 10 were designed to explore concept of father.

Each drawing was rated by three different raters. The three professional raters were chosen for this purpose by Dr. Glendon Casto. All three raters possessed at least a master of science degree in psychology and had extensive background in evaluating tests such as the Draw-A-Person Test. Reliability coefficients for the three raters are found on page 45.

The Written Attitude Test for Concept of Family and of Self Within the Family

The written attitude test was constructed in order to (a) vary
the means by which the investigator gained insight to the subjects' concepts under study (assuming that her assumption of the difference between the two tests is correct) and (b) to allow the investigator to validate the findings derived from the DAF Test if indeed the two measuring instruments could measure the same aspects of the concepts under study.

Contrary to the DAF Test, which was used here as a graphic vehicle of self-expression, the written attitude test was used here as a written test designed to evaluate various concepts formed by children. The specific part used in this study dealt with the child's concepts of family and of self within the family (see Appendixes B and C).

The written attitude test was composed of 24 items derived for the most part from an item pool utilized by Wight (1975) in developing a self-concept measure. The items included in this particular study were deemed by two professional judges to be important factors in measuring self-concept and concept of family. The judges were selected by Dr. Glendon Casto from the Exceptional Child Center at Utah State University.

Scoring system for most of the first scale--Questions 1 through 13 (measuring concept of family)--allowed the children to choose between four categories. Among the four choices, only the answers favoring the parents category over other categories were treated as reflecting positive family concept.

The scoring system for Question 14 allowed the children to choose between two categories. Of the two choices, only the answer favoring
parents' residence over children's residence was treated as reflecting positive family concept.

The scoring system for the second scale--Questions 15 through 24 (measuring self-concept in relation to the family unit) --treated only the positive answers ("yes") as representing positive attitude toward the concept under study.

The above-mentioned structural approach allowed the investigator to cross-validate the findings from the Draw-A-Family Test with the findings derived from the written attitude test.

To minimize cultural differences, the test developers applied a technique which was developed by Tucker (1976). Tucker constructed attitude scales for use in cross-cultural research using mixed standard scaling. The complete questionnaire which was developed for this study may be found in Appendixes B and C. Subjects' responses to the questionnaire may be found in Appendixes F and G.

Statistical Analysis

Introduction

The results of the Draw-A-Family Test and the results of the written attitude scales as measuring devices for concepts of family and of concept of self within the family for kibbutz children and city children were analyzed using the chi-square ($\chi^2$) test for homogeneity and the Pearson Correlation Coefficient for reliability. The Mann Whitney U test was used as an overall comparison of the outcomes.

Significance level for the study was established at the .05 level.
Statistical Analysis of the DAF Test

1. Inter-rater reliability coefficients were computed for the three raters on Questions 1 through 11. The Pearson Correlation Coefficient was used for this purpose.

Reliability coefficients for the three raters on the 11 questions ranged from .73 to .99. The inter-rater reliabilities were consistently high (above .90) for most questions.

2. Using the nonparametric chi-square technique, a comparison was made of the two subject groups' responses to each individual item observed on the DAF Test.

The chi-square test was applied to evaluate the homogeneity among the groups.

In the section to follow, comparisons between kibbutz and city groups are presented for 14 observations. The complete observational code which was developed for this study can be found in Appendix E. Detailed raw data on all the 14 observations are presented in Appendixes H and I.

Observation 1: Does the overall feeling projected from the drawings express a positive family concept?

The following raw numbers and percentages for the positive observations were obtained out of a total of 27 subjects in the kibbutz and 24 city children.

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>55.6</td>
<td>20.8</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 5.05 ($p < .05$) was obtained. A significant difference
is shown between the responses of the two groups; more kibbutz children's drawings were rated as demonstrating positive family concept than city children's drawings.

Observation 2: Are all family members represented in the family drawing?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>80.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 12.36 ($p < .05$) was obtained. A significant difference is shown between the responses of the two groups; more kibbutz children represented all family members than city children did.

Observation 3: Did the child represent himself in the drawing?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>92.6</td>
<td>62.5</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 5.73 ($p < .05$) was obtained. A significant difference is shown between the responses of the two groups; more kibbutz children represented themselves in their drawings than city children did.

Observation 4: Is the father represented in the drawing?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>77.8</td>
<td>37.5</td>
</tr>
</tbody>
</table>
A $\chi^2$ value of 6.92 ($p < .05$) was obtained. A significant difference between the two groups' responses was found; more kibbutz children represented their fathers in their drawings than city children did.

Observation 5: Is the mother represented in the drawing?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>74.1</td>
<td>37.5</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 5.51 ($p < .05$) was obtained. A significant difference between the responses of the two groups was found; more kibbutz children represented their mothers in their drawings than city children did.

Observation 6: Does placement of self in relation to other family members express positive feelings about the self?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>70.4</td>
<td>37.5</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 4.29 ($p < .05$) was obtained. A significant difference between the responses of the two groups was found; more kibbutz children's drawings were rated as demonstrating positive family concept than city children's drawings.

Observation 7: Are there positive indicators for the child's assessment of father's role in relation to the family unit?

The following raw numbers and percentages for the positive observations were obtained:
A $\chi^2$ value of 9.41 ($p < .05$) was obtained. A significant difference between the responses of the two groups was found.

Observation 8: Are there positive indications for children's assessment of mother's role in relation to the family unit?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>63.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 5.94 ($p < .05$) was obtained. A significant difference was found between the two groups' responses.

Observation 9: Did the child avoid the use of exaggeration, diminishing, or eliminating parts of the body of self?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>51.9</td>
<td>20.8</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 3.98 ($p < .05$) was obtained. A significant difference between the two groups' responses was found; more kibbutz children avoided the use of exaggeration, diminishing, or eliminating parts of the body of self.
Observation 10: Did the child avoid the use of exaggeration, diminishing, or eliminating parts of the body on the father?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>48.1</td>
<td>16.7</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 4.33 ($p < .05$) was obtained. A significant difference between the two groups' responses was found; more kibbutz children avoided the use of exaggeration, diminishing, or eliminating parts of the body of the father figure.

Observation 11: Did the child avoid the use of exaggeration, diminishing, or eliminating parts of the body on the mother?

The following raw numbers and percentages for the positive observations were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>48.1</td>
<td>16.1</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 4.33 ($p < .05$) was obtained. A significant difference between the two groups' responses was found; more kibbutz children avoided the use of exaggeration, diminishing, or eliminating parts of the body of the mother figure.

Observation 12: Where is the child in relation to other figures?

The following raw numbers and percentages for positive observations were obtained:
Observation 12.1, Center of Family

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.6</td>
<td>12.5</td>
<td>1.3</td>
<td></td>
</tr>
</tbody>
</table>

Observation 12.2, Apart or Separated

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>12.5</td>
<td>0.07</td>
<td></td>
</tr>
</tbody>
</table>

Observation 12.3, Near the Mother

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.3</td>
<td>4.2</td>
<td>5.13</td>
<td></td>
</tr>
</tbody>
</table>

Observation 12.4, Near the Father

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.6</td>
<td>28.8</td>
<td>0.15</td>
<td></td>
</tr>
</tbody>
</table>

Observation 12.5, Near Siblings

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.1</td>
<td>37.5</td>
<td>5.51</td>
<td></td>
</tr>
</tbody>
</table>

Observation 12.6, Not Present

<table>
<thead>
<tr>
<th>Raw Number</th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Percentage</th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4</td>
<td>37.5</td>
<td>5.15</td>
<td></td>
</tr>
</tbody>
</table>

There was no significant difference noted between the two groups' responses to Observations 12.1, 12.2, and 12.4. There was a significant difference in response to Observation 12.3. More kibbutz children drew
themselves near their mothers. The significant difference indicated in response to Observation 12.5 was that more kibbutz children draw themselves close to their siblings. In response to Observation 12.6, it was noted that more city children did not draw themselves at all.

Observation 13: Where is the father in relation to other figures?
The following raw numbers and percentages for positive observations were obtained:

<table>
<thead>
<tr>
<th>Observation 13.1, Center of Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibbutz</td>
</tr>
<tr>
<td>Raw Number</td>
</tr>
<tr>
<td>Raw Percentage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation 13.2, Apart or Separated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibbutz</td>
</tr>
<tr>
<td>Raw Number</td>
</tr>
<tr>
<td>Raw Percentage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation 13.3, Near the Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibbutz</td>
</tr>
<tr>
<td>Raw Number</td>
</tr>
<tr>
<td>Raw Percentage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation 13.4, Near the Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibbutz</td>
</tr>
<tr>
<td>Raw Number</td>
</tr>
<tr>
<td>Raw Percentage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation 13.5, Near Siblings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibbutz</td>
</tr>
<tr>
<td>Raw Number</td>
</tr>
<tr>
<td>Raw Percentage</td>
</tr>
</tbody>
</table>
Observation 13.6, Not Present

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$x^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>4</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>14.8</td>
<td>66.7</td>
<td>12.23</td>
</tr>
</tbody>
</table>

There was no significant difference noted between the two groups' responses to Observations 13.2 and 13.4. There was a significant difference between responses to Observation 13.1 by the two groups; more kibbutz children drew their father in the center of the family.

In response to Observation 13.3, the significant difference noted was that more kibbutz children drew their father near their mother.

In response to Observation 13.5, the significant difference noted was that more kibbutz children drew their mother near their siblings.

In response to Observation 13.6, the significant difference noted was that more city children did not include their fathers in the drawing.

Observation 14: Where is the mother in relation to the other figures?

The following raw numbers and percentages for positive observations were obtained:

Observation 14.1, Center of Family

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$x^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>29.6</td>
<td>4.2</td>
<td>4.05</td>
</tr>
</tbody>
</table>

Observation 14.2, Apart or Separated

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$x^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>0.0</td>
<td>12.5</td>
<td>1.68</td>
</tr>
</tbody>
</table>
Observation 14.3, Near the Father

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>18</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>66.7</td>
<td>12.5</td>
<td>13.23</td>
</tr>
</tbody>
</table>

Observation 14.4, Near the Child

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>33.3</td>
<td>4.2</td>
<td>5.13</td>
</tr>
</tbody>
</table>

Observation 14.5, Near Siblings

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>14</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>51.9</td>
<td>16.7</td>
<td>5.43</td>
</tr>
</tbody>
</table>

Observation 14.6, Not Present

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>7</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>25.9</td>
<td>66.7</td>
<td>6.95</td>
</tr>
</tbody>
</table>

There was no significant difference shown between the two groups' response to Observation 14.2. There was a significant difference between the two groups' response to Observation 14.1; that is, more kibbutz children drew their mother in the center of the family.

In response to Observation 14.3, a significant difference was demonstrated in that more kibbutz children drew their mother near their father.

In response to Observation 14.4, the significant difference was that more kibbutz children drew their mother by themselves.

In response to Observation 14.5, the significant difference was that more kibbutz children drew their mother near siblings.
In response to Observation 14.6, the significant difference demonstrated was that more city children did not draw their mothers.

Using the Pearson Correlation Coefficient

A comparison was made within each group of subjects' responses to items which were thought to measure the same concepts:

1. Concept of self was measured by Observations 3, 6, and 9 on the DAF Test. Positive correlations (average .82) were found between the items designed to measure concept of self. Positive correlations (average .80) were also found between the scores on the clustered observations measuring self-concept and the total score composed for the DAF Test.

2. Concept of mother was measured by Observations 5, 8, and 11 on the DAF Test. Positive correlations (average .81) were found between the items designed to measure concept of mother. Positive correlations (average .87) were also found between the scores on the clustered observations measuring a mother's concept and the total score composed for the DAF Test.

3. Concept of father was intended to be measured by Observations 4, 7, and 10 of the DAF Test. Positive correlations (average .89) were found between the items designed to measure concept of father. Positive correlations (average .84) were also found between the scores on the clustered observations measuring father's concept and the total score compared for the DAF Test.

Observation 1 on the DAF Test was designed to enable the judges to gain an overall impression of the drawers' feelings about their family.
Positive correlations (city: 0.80; kibbutz: 0.72) were found between the items designed to measure concept of self and Observation 1 on the DAF Test.

Positive correlations (city: 0.71; kibbutz: 0.79) were found between the items designed to measure concept of mother and Observation 1 on the DAF Test.

Differing correlations (city: 0.52; kibbutz, 0.80) were found between the items designed to measure concept of father and Observation 1 on the DAF Test.

Positive correlations (city: 0.79; kibbutz: 0.87) were found between the total score on the DAF Test and Observation 1 on the same Test.

Statistical Analysis of the Written Attitude Test

Parallel to the DAF analysis, the investigator used the chi-square technique in order to test homogeneity of responses in the two subject groups to each individual item on the written attitude test. The statistical report on the groups' responses to the written attitude test includes only the first choice responses acquired from this instrument. An in-depth report of missing answers or second choices was reported in the complete data analysis section on pages 69-79.

Question 1: When I feel bad, I prefer to talk about it with my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:
The $\chi^2$ value of 6.67 was obtained. The difference between the two groups' responses was not significant.

**Question 2:** I feel that I am a child of my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>1</td>
</tr>
<tr>
<td>Children from my class</td>
<td>3</td>
</tr>
<tr>
<td>Father or mother</td>
<td>23</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.65 was obtained. The difference between the two groups' responses was not significant.

**Question 3:** When I have problems, I prefer to discuss them with my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>--</td>
</tr>
<tr>
<td>Children from my class</td>
<td>--</td>
</tr>
<tr>
<td>Father and mother</td>
<td>27</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 3.70 was obtained. The difference between the two groups' responses was not significant.
Question 4: I feel that I most belong to my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>9</td>
</tr>
<tr>
<td>Children from my class</td>
<td>--</td>
</tr>
<tr>
<td>Father and mother</td>
<td>18</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 3.85 was obtained. The difference between the two groups' responses was not significant.

Question 5: I feel most comfortable when I am with my teacher, children from my class, my father and mother, people in the neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>--</td>
</tr>
<tr>
<td>Children from my class</td>
<td>10</td>
</tr>
<tr>
<td>Father and mother</td>
<td>17</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
</tr>
</tbody>
</table>
A $\chi^2$ value of 0.92 was obtained. The difference between the two groups' responses was not significant.

**Question 6:** I feel closer to my teacher, children in my class, my father and mother, people in the neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Children from my class</td>
<td>6</td>
<td>23.1</td>
</tr>
<tr>
<td>Father and mother</td>
<td>19</td>
<td>73.1</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>1</td>
<td>3.8</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 4.62 was obtained. The difference between the two groups' responses was not significant.

**Question 7:** I prefer to be with my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Children from my class</td>
<td>8</td>
<td>30.8</td>
</tr>
<tr>
<td>Father and mother</td>
<td>18</td>
<td>69.2</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.69 was obtained. The difference between the two groups' responses was not significant.

**Question 8:** It seems to me that the people who care most about me are my teacher, children from my class, my father and mother, people in the neighborhood.
A \chi^2 value of 2.91 was obtained. The difference between the two groups' responses was not significant.

Question 9: In the happiest moments of my life, I am with my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Children</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Father and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mother</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>People in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neighborhood</td>
<td>20</td>
<td>1</td>
</tr>
</tbody>
</table>

A \chi^2 value of 5.50 was obtained. The difference between the two groups' responses was not significant.

Question 10: When I want to confide in someone, I go to my teacher, children in my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

A \chi^2 value of 0.37 was obtained. The difference between the two groups' responses was not significant.
Question 11: I feel that those who love me the most are my teacher, children from my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>6</td>
<td>22.2</td>
</tr>
<tr>
<td>Children from my class</td>
<td>3</td>
<td>11.1</td>
</tr>
<tr>
<td>Father and mother</td>
<td>18</td>
<td>66.7</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.003 was obtained. The difference between the two groups' responses was not significant.

Question 12: Those I love the most are my teacher, children in my class, my father and mother, people in my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Children from my class</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Father and mother</td>
<td>25</td>
<td>92.6</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
A $\chi^2$ value of 1.85 was obtained. The difference between the two groups' responses was not significant.

**Question 13:** Those that understand me the most are my teacher, children from my class, my father and mother, people from my neighborhood.

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th></th>
<th>City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Teacher</td>
<td>1</td>
<td>3.7</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Children from my class</td>
<td>6</td>
<td>22.2</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>Father and mother</td>
<td>20</td>
<td>74.1</td>
<td>20</td>
<td>67.0</td>
</tr>
<tr>
<td>People in my neighborhood</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 3.70 was obtained. The difference between the two groups' responses was not significant.

**Question 14:** Where do you feel better, at the parents' home/children's home or school and class?

The following raw numbers and percentages were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th></th>
<th>City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw No.</td>
<td>Raw %</td>
<td>Raw No.</td>
<td>Raw %</td>
</tr>
<tr>
<td>Parents' home/children's home</td>
<td>21</td>
<td>77.8</td>
<td>23</td>
<td>95.8</td>
</tr>
<tr>
<td>School and class</td>
<td>6</td>
<td>22.2</td>
<td>1</td>
<td>4.2</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 2.13 was obtained. The difference between the two groups' responses was not significant.

**Question 15:** Usually I love myself--yes or no.

The following raw numbers and percentages of positive answers were obtained:

A $\chi^2$ value of 0.44 was obtained. The difference between the two groups' responses was not significant.
Question 16: Usually I love my family--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>96.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.003 was obtained. The difference between the two groups' responses was not significant.

Question 17: Usually I love my father--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>96.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.003 was obtained. The difference between the two groups' responses was not significant.

Question 18: Usually I love my mother--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>96.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.003 was obtained. The difference between the two groups' responses was not significant.
Question 19: Usually I am satisfied with myself--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>76.9</td>
<td>87.5</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.36 was obtained. The difference between the two groups' responses was not significant.

Question 20: Usually I am satisfied with my family--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>92.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.40 was obtained. The difference between the two groups' responses was not significant.

Question 21: Usually I want to be with my family--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Number</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>92.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A $\chi^2$ value of 0.40 was obtained. The difference between the two groups' responses was not significant.

Question 22: I feel that my father loves me--yes or no.

The following raw numbers and percentages of positive answers were obtained:
There was no difference at all between the responses of the two groups.

**Question 23:** I feel that my mother loves me--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Numbers</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

There was no difference at all between the responses of the two groups.

**Question 24:** I feel that my parents care for me--yes or no.

The following raw numbers and percentages of positive answers were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Kibbutz</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Numbers</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>Raw Percentage</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

There was no difference at all between the responses of the two groups.

**Statistical Comparison of the Two Testing Tools**

In each group, a comparison was made of the sum score over subjects' responses to both measuring instruments used in the study. In both groups, a negative nonsignificant correlation was found between the total scores measured on the DAF Test and the total score measured on the written attitude test ($r = -.09$ in city and $r = -.01$ in kibbutz).
In addition to the correlations test which showed no concordance between the total scores on both DAF and the written attitude test, it was interesting to evaluate the overall differences in the distributions of the sum scores on each of the tests produced by the two subject groups. Therefore the Mann Whitney U Test was applied separately to the written attitude test results and to the DAF Test results. The Mann Whitney U Test showed a significant difference \((p < .01)\) on the DAF Test between the two subject groups but nonsignificant \((p < .05)\) on the written attitude test.

Discussion of Findings

Analysis of Differences in Groups' Reactions to the Written Attitude Test and the DAF Test

The written attitude test. It should be noted that a major difference between kibbutz and city subjects in reaction to the written attitude test was noticed at the time of administration. The kibbutz children seemed to be frustrated by its structured form. Many kibbutz children asked to be given permission to write more than one answer on each specific question. The investigator's response to their request was that the test was planned for one answer only. The investigator felt that despite this answer, many kibbutz children were unhappy about the format of the test and its restrictions, and they chose to give second answers to many questions. Some of the comments were, "It will not be fair to exclude the other answer," or "It is really hard to choose," or "Various answers suit different times of my life, circumstances, etc."
Overall, the city children seemed to feel more comfortable with the test format. However, there were a few cases in which city children preferred to write second answers.

In an attempt to explain the difference in reaction to the written attitude test between the two groups, the investigator considered some basic variables which might have influenced the groups' responses to the test.

Since the early days of the kibbutz movement, the emphasis in kibbutz education has been on fostering in the child a sense of individuality, creativity, and a basic trust. "The learning process, therefore, is based on internal motivation with no recourse to marks and examinations" (Gerson, 1978, p. 89).

As a result of the education philosophy carried by most kibbutzim, the most common means of evaluation practiced there allows the kibbutz child to explore possibilities and to express feelings and ideas. Very rarely is the kibbutz child asked to respond to a yes or no form of a question. Within the kibbutz educational system, the kibbutz children are encouraged to express their impressions and their feelings through a wide range of expressional mediums and techniques.

On the other hand, the city children are exposed to education systems which strongly emphasize a cognitive content. Due to the larger number of students in each class, there is less time for individual expression. Grading is an essential element in the city education system and the city children are accustomed to test forms in which there is only one correct answer. The school system in the city seems to be more rigid than the kibbutz' school system and less personal.
In reviewing the groups' reaction to the written attitude test, the investigator concluded:

1. Subjects' responses to the written attitude test demonstrated the possible weakness of such a test, as it forced the subjects to respond to previously planned, structurally rigid instrument. By its nature, the written test restricted the children's statements to two exclusive responses ("yes" or "no").

2. The kibbutz children's reaction to the written test might be explained in light of their educational and social background (see discussion on pages 27-29) and the strong emphasis on their creative upbringing.

The solution many kibbutz children and a few city children created in dealing with the problem of such restriction allowed them to avoid possible "unfair" or "insufficient" responses to the questions. Such responses might be judged as demonstrating an unruly behavior or as reflecting inability to cope with structured form of instructions. It can also be interpreted as reflecting an ability to judge intellectually, mentally, and emotionally the consequences of blindly complying with the test's rules. Kohlberg's findings (1974) on the moral development of kibbutz children are in line with this last interpretation.

The difference in the groups' reaction to the written test may also reflect a creative ability on the part of the kibbutz children in their attempt to modify the test for their unique needs. This again can be viewed in light of the differing educational philosophy of the two communities (see discussion on pp. 27-29).

In evaluating the factors which contributed to the success of the Israeli army in the Six-Day War, a group of army psychologists
suggested that the kibbutz soldiers contributed much to this success (Amir, 1967). In the discussion of the specific traits of the kibbutz-born soldier, it was pointed out that s/he is highly capable of functioning in an unexpected situation and to assume leadership in a crisis situation. Those traits can be viewed as relating to overall creative ability (Thurstone, 1952; & Torrance, 1959). Maslow (1971) also pointed out the close relationships between the creative personality and the individual's ability to form a healthy self-concept.

The investigator of this study was aware of the possibility that lifestyle might not have been the only variable affecting the subjects' responses to the written attitude test. Some of the influential variables were probably tied directly to the specific lifestyle under study (such as the ones discussed on pp. 27-30). However, some variables were probably not related to the specific style of living but could have influenced the subjects' responses to particular parts of the written attitude test. For example, within each of the educational systems under study, teachers' unique personalities and their individual abilities to form close relationships with some of their students or all of them, might have caused some students to feel close to those particular teachers.

Preference of people other than parents for advice or comfort may also be viewed as a reaction to lack of positive communication with the parents. It can also reflect unique relationships formed between students and their teacher as a result of the teacher's unique qualities or parents' absence from home as a result of demanding working hours.
Viewing current statistics about the rate of divorce in the Israeli society (Israel Statistical Abstracts, 1962) and studies in family relations (Burgess, 1954), the investigator assumed that despite the varying social structure within which a family operates, not all families function as a happy unit and not all parents function well as parents.

A major question here then is, how the two social systems under study affected the child who belonged to a well-functioning family and how they affected the child who needed substitute or supplementary places for his family and his home environment for a short or long period of time?

Discussion of Data

In the discussion to follow, the investigator attempts to explain the obtained findings. The explanations are subjective in nature and represent the investigator's viewpoint only. They should be viewed in this light.

Question 1 was set to detect the child's main source of emotional support. In both groups, the majority of the subjects preferred to talk with their parents about their bad feelings (26 kibbutz children and 16 city children) and no significant difference between the groups was found. The raw data indicated that (a) more kibbutz children preferred to share bad feelings with their parents, (b) more city children preferred to discuss their feelings with the teacher (six city children versus one kibbutz child), and (c) more kibbutz children preferred to discuss their bad feelings with classmates (three kibbutz children versus one city child).
As pointed out before, preference of teacher might be attributed to the specific teacher of a particular class or to the lifestyle of the particular group of children. The investigator of this study believes that there was a difference between the choosing of a teacher as a first choice or when the teacher was viewed as an important source for emotional support yet s/he was placed as secondary choice.

In response to Question 1, four kibbutz children chose the teacher as the second person to talk with while feeling bad; none of the city children gave second answers. In their attempt to justify the need to give more than one answer, some kibbutz children explained that some of their bad feelings were related to family situations while others were related to their life in the children's community.

The selection of parents as first choice and teacher as a second choice might indicate that the children who chose first the parents and then the teacher felt closer to their parents, but that they sensed that the teacher was able and willing to help them too. Overall, the investigator's impression was that the data reflect a stronger confidence in parents' emotional support in the kibbutz group. The kibbutz children's verbal and written responses suggested also realization of alternative channels of communications and emotional support both through classmates and the teacher.

Question 2 was a crucial question, as it was set to detect whether or not the kibbutz child, due to the kibbutz lifestyle, grew to believe himself as a child of a traditional family setting or as a child of other social elements such as the peer group or the kibbutz society.

Question 2 was worded very carefully in order to capture the specific slang used by both kibbutz and city children to convey a
true feeling of natural, not social belonging and to eliminate possible linguistic misunderstandings.

In response to Question 2, all kibbutz children confirmed that they saw themselves as children of their natural parents. While the majority of city children shared the same feelings with the kibbutz children, two city children felt that they were children of their peers in school.

Overall, no significant difference was shown between the two groups in the responses to Question 2. However, more children from the kibbutz group (27 kibbutz children versus 22 city children) stated they belonged to their parents.

These results seem to contradict Bettelheim's statements about the feelings of belonging reflected by kibbutz children (1969).

In an attempt to understand the possible causes for Bettelheim's conclusion, the investigator of this study suggested (a) the possible use of vague or conflicting terms by Bettelheim which resulted in confusion or misunderstanding by the kibbutz children, and (b) the investigator suspected that a particular phrase, "our children," which was often used by kibbutz members in reference to the kibbutz children, was misunderstood by many researchers visiting the kibbutz who tended to interpret it as an indicator for the place of the kibbutz child as the community child rather than as his parents' child.

While Question 1 dealt directly with source of help for emotional need, Question 3 was designed to detect source of cognitive as well as emotional help. No significant difference between the two groups was shown in the statistical analysis of the data. The raw data from Question 3 showed (a) more kibbutz children saw their parents as the
main source for advice (18 kibbutz children and 13 city children), and (b) a considerable number of children from both groups chose the teacher as their first choice (nine kibbutz children and eight city children). This might possibly be understood in light of the children's respect for the teacher's knowledge and education which in many cases was probably better than that of some parents.

The main difference between Question 2 and Question 4 was that Question 2 asked for the child's specific feeling of belonging as a child, while Question 4 was designed to throw light on the child's overall feeling of belonging as an individual.

In response to Question 4, the majority of children in both groups viewed themselves as belonging to their parents (24 kibbutz children and 23 city children). However, two kibbutz children answered that they belonged to their peer group. According to their teacher and metapelet, the particular families of those two children were experiencing some difficulties. In light of this information, the two kibbutz children's choice of the children's house and their peers was viewed by the investigator as perhaps demonstrating the success of the kibbutz society in establishing a positive substitute for an unsatisfactory environment at home.

Question 5 was designed to show with whom the children of both groups felt most comfortable.

Answers of both groups to Question 5 were divided mainly between the parents and the peer group. Most children in the two groups preferred the parents (17 kibbutz children and 19 city children) and no significant difference between the two groups' responses was established. Basic differences in the groups' responses were pointed out in the raw data.
(a) More kibbutz children felt most comfortable with their peer group than city children (10 kibbutz children versus five city children), and (b) six kibbutz children gave differing second answers in which they chose alternatives to their parents while only two city children gave second answers. This difference in response between the two groups was interpreted by the investigator as reflecting differences in living style. The kibbutz seemed to offer alternative home-like environment in the children's house. This probably allowed the kibbutz child to establish a feeling of comfort and security both while with his parents and while with his peers. The large number of second responses of the kibbutz children reinforced this assumption, as those children noted that they felt good about being with their parents but that it also felt good being with their friends at the children's home.

The difference between Questions 5 and 6 was that Question 5 dealt with preference for a comforting social environment, while Question 6 dealt with the elements that bring feeling of closeness (emotional need). Therefore, it was interesting to see the difference in response to the two questions. In response to Question 6, versus Question 5, more children from both groups pointed out their preference of parents. However, the data indicated that more city children chose their parents as the main source of closeness (19 kibbutz children and 22 city children).

In comparison with the results from Question 5, it was noted that in Question 6 less children from both groups preferred the closeness of their peers. However, the kibbutz group exhibited a greater preference of peers than the city group (six kibbutz children versus one city child).

The investigator suggests that this might possibly be viewed as (a) reflecting the two groups' stage of social development, (b) reflecting
weaker emotional ties between kibbutz family members, or (c) reflecting a greater impact of friendship among peers in the kibbutz as a result of their environment.

In response to Question 7, the majority of children in both groups noted a preference of being with their parents (18 kibbutz children and 20 city children), and no significant difference between the two groups was found. However, (a) a bigger percentage of city children preferred the parents' company and (b) a larger number of kibbutz children preferred to be with friends from the peer group (eight kibbutz children versus four city children). Those differences might be interpreted either as indicators of less favorable home environment in the kibbutz or as indicators for the success of the kibbutz in the creation of supportive and inviting social environment outside the parents' home. Such an alternative environment probably met the needs of the children who were faced with difficult situations in their parents' place as well as the social developmental needs of this age group.

Question 8 was designed to detect possible differences between the two groups in regard to the children's perception of those who cared most about them. The significance of the findings derived from Question 8 lies in the fact that despite obvious differences in lifestyle, there was no difference in the role of parents in caring for their children, etc., in the two groups. Nevertheless, seven kibbutz children and none of the city children preferred to give second answers. The investigator suggested that this response might reflect the need of the kibbutz children to give credit to the other significant people in their life.
No significant difference between the two groups was found in the responses to Question 9. However, (a) large numbers of kibbutz children indicated that in the happiest moments of their lives they were with their friends from the peer groups (ten kibbutz children and three city children) and (b) nine kibbutz children and one city child insisted on giving a second answer.

In trying to understand the meaning of the data, the investigator considered variables which might have affected the children's responses. One such variable might be the kibbutz lifestyle which could have provided the kibbutz children with the opportunities to share rich and fulfilling experiences with their peers and apart from the family. As to the city children, the researcher felt that the traditional family structure may not have given them the opportunity to experience such intensive group experience.

In this kibbutz, like in many other kibbutzim, the classroom itself is an extension of the children's house in which the children live, sleep, eat, play, and study. Class activities are not restricted to the classroom and are carried out frequently in various sections of the house and its surroundings. The classroom itself is inviting, well kept, and cared for. It is open for the children 24 hours a day throughout the year.

In the city, the classroom is built as a part of the school building, which is fenced for security reasons. The classroom itself is usually crowded and is used mainly on school hours and days. The investigator felt that the classes in the city did not project the homey and intimate atmosphere which the kibbutz class reflected.
Also, most kibbutz education for this age level is carried out in small groups of 15 to 20 students, while most city education for this age level is carried out in groups of 30 to 40 students. The difference in class size and group size, especially at the age of 9 to 10 years, might have affected the child's feelings of comfort and intimacy within the group.

The questions asked here were (a) whether preference of friends demonstrated by some kibbutz children resulted from the availability of such environment outside the family home, and (b) if this is true, then should preference of peers be viewed as threatening to the formation of family ties or not?

No significant differences between the two groups were found in the statistical analysis of Question 10. Approximately the same percentage of children from both groups preferred to confide in their parents (18 kibbutz children and 15 city children), and a large number of children from both groups (six kibbutz children and seven city children) chose to go to the teacher while a few children preferred to go to their peers (three kibbutz children and two city children). Here again, a large number of kibbutz children (eight) insisted on giving second answers while only two city children gave second answers. Interpretation of this data followed the line of previous interpretation. Both the statistical analysis and the raw data confirmed the findings derived from responses to Question 3.

Question 11 dealt with the emotional aspect of the relationship. Almost all the children in both groups (26 in the kibbutz and 24 in the city) felt that their parents were the ones who loved them the most, and no significant difference was found between the two groups.
The results seemed to suggest that despite the unique lifestyle in a kibbutz, the basic secure feeling of parents' love was sustained. The fact that four kibbutz children chose their teacher as the second person to love them might be viewed as reflecting the children's perception of the teacher's feelings toward them and their need to acknowledge it.

Once more, it was demonstrated in the statistical analysis of Question 12 that there was no significant difference between the two groups in regard to those the children love most. In both groups, most children answered that they loved their parents most (25 in the kibbutz group and 24 in the city group). Four kibbutz children gave second answers. Three of them selected the teacher as the second person they loved; one city child gave a second answer selecting children from his class. Interpretations of the data were in line with previous interpretations discussed in reference to Questions 2, 8, and 11.

Like Question 3, Question 13 dealt with cognitive and affective relationships. Statistically, no significant differences were found between the two groups. The majority of children from both groups viewed their parents as the ones understanding them the most (20 kibbutz children and 20 city children). However, (a) six kibbutz children and two city children noted that those who understood them most were their peers, and (b) 11 kibbutz children insisted on giving second answers; none of the city children gave second answers. In response to those data, the investigator suggested that the choice of other people beside the parents might be viewed as reflecting the bond between children of the same peer group in the kibbutz. (See discussion of responses to Question 9.)
The importance of Question 14 lies in that it was aimed at pointing out the possible difference in environmental preferences.

No significant difference between the two groups was found in the statistical analysis, as most children in both groups preferred their parents' home (21 kibbutz children and 23 city children). However, it was shown in the raw data that (a) six kibbutz children preferred the children's home and (b) five other children insisted on choosing the children's home as their second choice. (c) Only one city child preferred the school, and (d) only one city child insisted on choosing the school as his second choice.

In discussing the nature of the answers with the metapelet and the teacher of the kibbutz group, both individuals pointed out that most of the children who felt better in the children's home came from families which experienced some kind of difficulties relating mostly to the relationship between the parents. The same kind of observation was noted also by the city teachers. The difference in the groups' reaction to the test was interpreted as strengthening the investigator's impression that the kibbutz structure offers its children a place within the family and an alternative in the children's house. The investigator suggested that kibbutz children viewed the children's house as an alternative to the parents' home rather than as a substitute.

Questions 15 to 24 asked for a yes or no answer. No significant differences between the two groups' responses to those questions were found in the statistical analysis. However, the investigator questioned the value of the data gathered from this question, as the responses seemed to be lacking in variation. It was the investigator's
impression that the structure of the questions (yes or no answers) restricted the kibbutz children's responses.

Discussion of Findings from the DAF Test

Introduction. An analysis was done by looking at the (a) overall feelings projected in the drawings (Observation 1), (b) analysis of specific indicators in the drawings (Observations 2 through 11), and (c) analysis of other indicators in the drawings (Observations 12 through 14).

It was hoped that objective insight might be provided in the analysis of those indicators to the concepts of (a) self in relation to the family and (b) concept of the child's immediate family.

1. Discussion of overall analysis of the drawings (Observation 1).

Observation 1: Does overall feeling projected from the drawing (cohesiveness, smiles, touch, etc.) express positive family concept?

According to Machover (1958), facial expressions depicting various emotions are felt to be one of the more reliable signs in human figure drawings. Machover wrote, "Regardless of skill, we find that the subject will unconsciously set a tone to his drawing by an expression of hate, fear, bewilderment, aggression, rebelliousness, placation, meekness, or even of inappropriate affect" (p. 42). While investigating the relationship between social interests and the drawings of 10-year-old children, Stone and Ansbacker (1965) found that children who were interested in others and in communicating with others draw more frequently and in more detail the communication organs (eyes, mouth, and hands). It was assumed that positive overall feelings and negative overall feelings can be projected from the DAF Test and that those
feelings can be detected. This assumption was confirmed by Koppitz in regard to the HFD Test too.

Contrary to the rest of the observations on the DAF Test, Observation 1 was conducted by the judges mainly in an intuitive manner. However, the investigator felt that the judges' knowledge in child psychology and testing analysis was probably used in the decision making of the observing judges.

It was demonstrated in the raw data that three times as many positive drawings were drawn by the kibbutz group than by the city group (15 in the kibbutz group and five in the city group). This was interpreted as demonstrating a happier concept of family in the kibbutz group.

2. Discussion of specific indicators in the drawings (Observations 2 through 14).

Observation 2: Are all family members represented in the family drawing?

This observation was designed to add information to the total assessment of family concept which was measured also by Observation 1.

Koppitz (1968) found:

The omission of family members from a family portrait reflects strong negative attitudes on part of the child toward the omitted family members. The same is true when a child attempts to draw someone in his family but is unable to finish the figure of that particular person. Quite often, a child will have no difficulty depicting one parent or sibling but will be unable to complete the drawing of the other parent or another brother or sister. Whenever this occurs, it is a good indication that the child is hostile toward that particular parent or sibling. (p. 139)

DiLeo (1973) concluded, "Forgetting to include a family member is expressive of a negative attitude toward that person, rejection, or symbolic elimination" (p. 108). It was assumed, therefore, that
representation of the actual family reflected a more positive concept of family than the representation in which various family members were omitted.

Significant differences between the two groups were established. Drawings made by 20 kibbutz children and 5 city children represented all family members. According to the assigned judges, the drawings made by the kibbutz children exhibited a more complete family presentation. The investigator's interpretation of the data suggested a stronger family concept in the kibbutz group than in the city group.

Observation 3: Did the child represent himself in the drawing?

The observation was designed to gain insight to self-concept as projected by the two groups.

Analysis of the drawings revealed that some children omitted themselves from family drawings (two from the kibbutz group and nine from the city group). Koppitz (1968) found that this occurs most often on drawings of children who do not consider themselves an important or integral part of the family. According to Koppitz:

It reflects the child's unconscious feeling of insignificance and rejection. A socially and emotionally well-adjusted child is usually quite pleased with himself and has a healthy respect for himself. More often than not, a happy young child will draw himself first and will place himself in the center of the family group (p. 135).

Dileo (1973) noted that:

It is unusual for a child to draw the family and not to include all members. Omission of self is seen in drawings by children with feelings of inadequacy or of not belonging. In a less explicit display of the same problem, the child may relegate himself to the very end of the series of family members, not through modesty but as an expression of low status (p. 109).

It was assumed, therefore, that children who included themselves in the family drawing projected a healthier self-concept than those children who did not.
The kibbutz children who represented themselves in the drawing (25 versus 15), a significantly larger number, was interpreted as demonstrating a more desirable self-concept on the part of the kibbutz children both as individuals and as members of their family.

Observations 4 and 5 dealt with the absence of parents from the family drawing.

Observation 4: Is the father represented in the drawing, and
Observation 5: Is the mother represented in the drawing?

As was noted by DiLeo (1973), the omission of particular family members from a drawing of the family indicates negative attitude toward this person (see also discussion of Observation 2). In the kibbutz group, 21 children presented their fathers in the drawings, while only nine city children presented their fathers in the drawings. At the same time, 20 kibbutz children presented their mothers in the drawings, while only nine city children presented their mothers in the drawings.

The significantly larger number of kibbutz children who presented their parents in the family drawing was interpreted as demonstrating a more positive concept of father and mother in the kibbutz group. It was also interpreted as projecting a more positive feeling toward father and mother in the kibbutz group.

Observation 6: Does placement of self in relation to other family members express positive feeling about self? The observation was designed to gain insight to concept of self as a family member as projected by the two groups.

DiLeo (1973) observed that a child will tend to place himself next to the favored parent or sibling. As was noted in the discussion
of Observation 3, various researchers found that the exclusion of self from the family drawing reflected insecurity or low self-concept in regard to the family unit.

It was assumed, therefore, that a child who had positive feelings about his place in the family included himself in the family drawing. It was also assumed that a child who had positive self-concept and a feeling of acceptance and belonging to the family unit (a) placed himself in a central place on the paper rather than on its back or corners and (b) did not compartmentalize or separate his figure from the rest of family figures.

Significantly larger numbers of kibbutz children placed their self positively in relation to other family numbers (19 versus nine). This was interpreted as demonstrating more desirable self-concept on the part of the kibbutz children both as individuals and as members of their family.

Observation 7 belonged to a cluster of questions (4, 7, 11, and 13) which were designed to explore the concept of father as projected by the two groups.

Observation 8 belonged to a cluster of questions (5, 8, 11, and 14) which were designed to explore the concept of mother as projected by the two groups.

Observation 7: Are there positive indicators for child's assessment of father's role in relation to the family unit?

Observation 8: Are there positive indicators for child's assessment of mother's role in relation to the family unit?

Koppitz explained:
The child who is happy in his family group tends to draw all members of his family more or less in the order of their age and in correct size to each other. But most children with emotional problems are ambivalent toward their parents and siblings. They have both strong positive and strong negative feelings toward them. This ambivalence is often shown by a change in the size and position of the family members. (1968, p. 141)

While observing graphic signs for interaction and isolation, DiLeo found that the drawings of school-age children, positive interaction between two members of the family indicates a good relationship. On the other hand, hostility may be expressed by the use of weapons or other materials directed at the adversary. Lack of interplay among family members is often indicated by depicting each in a separate compartment, doing something alone, in social isolation without reference to any of the others. "Facial expression was another indicator which has proved to be one of the characteristics of drawings which may be judged directly with considerable confidence" (Machover, 1949, p. 42).

Machover stated:

In determining the contact of the individual with the social environment, the direction of the arm placement is considered important. In general, the direction and fluency of the arm lines relate to the degree and spontaneity of extension into the environment. (p. 610)

It was assumed therefore that a graphic representation of a father or mother figure which indicated positive involvement with family members also indicated a positive perception of the father or the mother by the drawer. Significantly larger numbers of kibbutz children used positive graphical means which expressed favorable interaction or relation between father or mother and other family members. Seventeen drawings with positive signs relating to father's figure were drawn by the kibbutz children, and four drawings with positive
signs relating to father's figure were drawn by the city children. Also, 17 drawings with positive signs relating to mother's figure were drawn by the kibbutz children and six drawings with positive signs relating to mother's figure were drawn by the city children. This was interpreted as demonstrating a favorable concept of father and mother in the kibbutz group.

Observations 9, 10, and 11: Did the child avoid the use of exaggeration, diminishing, or eliminating parts of the body on (9) self, (10) father, (11) mother?

Machover (1949) pointed out that a child will emphasize and exaggerate in his drawings those parts of the figure which have special meaning for him. She stated that a child will change and distort a human figure on his drawing until it resembles or reflects his own perception of himself. According to DiLeo:

When a child's image of a parent is of one who is domineering, overwhelming, aggressive, or frightening, the child will tend to draw that person larger than the others in a family group, regardless of actual physical dimensions. (p. 49)

It was assumed therefore that a graphic representation of the figures under observation in which parts of the body were exaggerated, diminished, or eliminated reflected some sort of anxiety feeling toward this person.

Significantly larger numbers of kibbutz children avoided the use of the above mentioned techniques while drawing themselves, their father, and their mother.

The drawings produced by the kibbutz children showed that 14 kibbutz children avoided using this negative sign in the drawing of self; 13 kibbutz children avoided using this negative sign in the drawings of father and mother.
The drawings produced by the city children showed that only five of them avoided using the negative signs in the drawings of self and four city children avoided using the negative signs in the drawings of father and mother. This was interpreted as demonstrating a more positive concept of (a) self, (b) father, and (c) mother by the kibbutz group.


Observations 12, 13, and 14: Where is the (12) child, (13) father, (14) mother in relation to other figures? Possible answers were center of family, apart or separate, by the mother, by the father, by the child, by siblings, not present.

Observations 12, 13, and 14 were designed to explore the nature of interrelations within each family as viewed by the drawers. The judges were given six possible observational choices when judging each of the three questions. They were allowed to give more than one answer to each question. If necessary, the judges were permitted to respond to all six possibilities. This was done in order for them to detail accurately the physical closeness between the various family members included in the drawing.

In their attempt to judge closeness between family members, the judges used approximate estimation and avoided use of measurement devices.

In discussing their feelings about the judgment of the drawings, all three raters expressed uneasiness about their judgment on the last three questions. They were unsure of their decision or the guiding code used by each of them. As a result, Observations 12, 13, and 14 were the only questions which were not analyzed independently by each
rater. In the final rating session, the raters gathered together, discussed each drawing, and made a group decision. As a result of this unexpected problem, the investigator feared possible contamination in the treatment of those questions. Therefore, it was decided to exclude those results from the calculated total used in the analysis of the drawings (totals for concept of self, concept of father, and concept of mother).

However, the results were reported in the statistical analysis section, pages 49-54 and were analyzed separately.

In light of the previously discussed research findings, it was assumed that (a) placement of family member in the center of the family unit reflected the child's perception of their role within the family. For example, it was assumed that placement of father and mother in the center of the family indicated a more positive perception of their role as parents in the child's family and (b) placement of family members close to each other represented closeness or attachment between those family members. For example, it was assumed that placement of father and mother close to each other but as a separate unit from the rest of the family reflected existence of bond between them but it also reflected a less positive perception of their overall role in the child's family.

In light of the statistical findings and inspection of the raw data as concluded mutually by all raters, the investigator concluded that the drawings of the kibbutz children reflected:

1. More positive concept of self within the family.
2. More positive concept of father's role in the family in terms of the father's associations and closeness to the drawer, his mother and other family members.
3. More positive concept of mother's role in the family in terms of the mother's associations and closeness to the drawer, his/her father, or other family members.

4. Even though the kibbutz children expressed a strong bond between their parents, the observers did not seem to detect an obvious feeling of competition, jealousy, anxiety, or frustration related to parents' closeness. Rather, parents' closeness seemed to be accepted and presented by the kibbutz children in a positive way.

All in all, more desirable concepts of self within the family, the family as a unit, mother and father were consistently demonstrated in the DAF Test from the drawings of the kibbutz children.

Analysis of Differences Between the DAF Test and the Written Attitude Test

Slightly negative correlation was found between the two testing instruments of this study. This was interpreted as confirming the investigator's suspicion that as a projective and creative technique, the DAF Test might have explored different levels and different aspects of the concepts under study than that which were studied by the written attitude test. The investigator suspected that the DAF Test may have reflected the inner, unguarded, intuitive feeling of the drawer. On the other hand, it was suggested that the written attitude test might have reflected the artificial, exterior, socially molded and consciously guarded aspect of the concepts under study.

After careful review of some individual responses to both instruments, the investigator noticed various individual cases in which the child's overall reaction to the written attitude test reflected positive concept of self and of family while this child's drawings reflected
negative concept of self and family. There was not even one case in which the opposite of this occurred.

In trying to explain all this, it was noted that both subject groups participating in the study were raised in a society which stressed the significance of the word as a major communicative means. This can explain also both groups' difference in reaction to the two testing devices. While being introduced to the DAF Test, the subjects' only concern was in regard to technical and aesthetic problems, not content problems. At the same time, the reverse was true in the groups' reaction to the written attitude test.

In view of all the above observed incidents, it was suspected that the subjects in both groups were unaware of the various implications and of the possible meanings of the drawings as opposed to their clearly demonstrated awareness of the meanings and significance of the written answers. In light of the observed wide gap in subjects' reactions to a written test versus drawing test and in light of the low correlation found here, the investigator questions the practicality of the widely assumed method of verifying results of drawing analysis by attempting to correlate them with results from written instruments.

Summary

The major findings derived from this study were interpreted as supportive of the study's problem statement. Kibbutz lifestyle with its unique arrangement for children's education outside the traditional family home from early ages did not seem to damage the child's concept of self within the family or his concept of family.
Hypothesis 1 stated: There will be no significant difference between kibbutz children's concept of family as measured by the DAF Test and middle class city children's concept of family as measured by the DAF Test.

Hypothesis 2 stated: There will be no significant difference between kibbutz children's concept of self within the family as measured by the DAF Test.

In regard to Hypotheses 1 and 2, significant difference was shown by statistical analysis of the DAF Test between the two groups' responses to each item on the test.

Drawings produced for this study by the kibbutz children reflected a significantly more positive view of the concepts under observation. More specifically, in contrast to drawings produced by city children, drawings produced by the kibbutz children reflected significantly more positive view of family concept, concept of mother, concept of father, and concept of self within the family.

Also, high correlations were demonstrated between items dealing with the same concepts in the statistical analysis of the reliability of the DAF Test. As a result, the investigator tended to accept the DAF analysis as reliable.

Hypothesis 3 stated: There will be no significant difference between kibbutz children's concept of self within the family and middle class city children's concept of self within the family on responses to a written attitude test.

Hypothesis 4 stated: There will be no significant difference between kibbutz children's concept of self and middle class city children's concept of self on responses to a written attitude test.
The third and fourth hypotheses of this study were designed with two questions in mind:

1. Can a restricting form of written attitude test be used to measure effectively emotional concepts such as the ones measured here?

2. Can a restrictive form of written attitude test be affectively used as a validating instrument of projective technique such as the DAF Test?

As a consequence of subject responses to the written attitude test, findings derived from this test were divided into two categories:

1. The official responses which conformed with the test structure. Those responses were processed statistically.

2. The unofficial responses which subjects indicated. Those responses were presented in a descriptive manner. The findings under this category were found valuable to this study especially in light of the two questions regarding the affectiveness of the written instrument.

As a result of the statistical findings of the official responses (see Category 1), the third and fourth null hypotheses were not rejected. No significant difference between the two groups' responses was shown in the statistical analysis of the written attitude test. More specifically, no significant difference was found between the groups' concepts of the self within the family, concept of family, concept of mother, and concept of father as measured by various questions in the written attitude test. Those findings were considered therefore as basically reflecting a different level of concepts under study than that which was measured by the DAF Test.
When analyzing relations between the two testing devices, the investigator observed:

1. Low negative correlation between the DAF Test and the written attitude test.
2. Low variability in subjects' responses to the written attitude test within groups and between groups.
3. Broad variability in subjects' responses to the DAF Test within groups and between groups.
4. While reviewing the overall testing results produced by their students, teachers of both groups suggested that from their knowledge of the children or the children's families the DAF Test reflected more accurately the family situation and the child's overall perception of self within the family.

In response to the two questions which underlined the third and fourth hypotheses, subjects' responses to the written attitude test were interpreted as demonstrating the inadequacy of the specific instrument designed for this study to accurately measure a subconscious conceptual level. In fact, an in-depth descriptive analysis of subjects' unofficial responses on the written attitude test was directly and indirectly thought to support the findings derived from the DAF Test.

Conclusions

As a result of the overall findings, the following conclusions have been drawn:

1. Environmental factors such as the kibbutz lifestyle did affect the formation of the concepts under study.
2. Kibbutz lifestyle had a positive effect on children's formation of the concept of family.

3. Kibbutz lifestyle had a positive effect on children's formation of the concept of self within the family.

Various aspects of the kibbutz lifestyle probably contributed to the formation of positive concepts of family and of self in the kibbutz children. Five major characteristics of kibbutz life were assumed to have strong impact on those concepts:

1. The educational philosophy of the kibbutz as well as the means by which it is carried out.

2. The moderating role of the children's community on the kibbutz child's emotional dependency with his parents.

As far back as 1969, Leon suggested that the kibbutz system seems to serve not only its children, but both "better" and "worse" parents. Children from temporarily or chronically unhappy families can find an outlet for their needs in the children's house and the children's society.

The findings of this study seem to strengthen the assumption that the two emotional and organizational centers (the children's house and the parents' home) play a positive rather than negative role in the life of the growing kibbutz child. This, of course, is a case of close cooperation between the parents and the caregivers.

3. The support of the peer group.

At all ages, a group of peers is considered an important factor in the socializing processes of the kibbutz child. The association of the kibbutz child with his peer group from very early age was viewed in two extreme ways: The first theory suggests that association with
the peer group grants the child a feeling of belonging which strengthens his self-confidence. The second theory suggests that this association prevents regression into passivity and autoeroticism.

The findings of this study seemed to support the first theory rather than the second.

4. The unique characteristic of kibbutz family relations which are not based on economical needs and which do not force the children into economical dependency upon their parents. This probably affects the older kibbutz children more than the elementary school-age group.

5. Division of responsibilities in child care between the family and the community, the latter in the form of caregivers and teacher.

While relating Margaret Mead's findings to the kibbutz educational reality, M. Gerson (1978) writes:

The frequent misconceptions of the parental role in the kibbutz can be the result of widely accepted notion that an exclusive relationship between mother and infant is the sole guarantee for the healthy, emotional growth of the child. Margaret Mead's conclusion based on cross-cultural studies showed that adjustment is best if many friendly people care for the child (p. 83).

The results of this study give strength to Mead and Gerson's argument.

Recommendations

Based upon the experiences gained by the investigator during the course of this project and findings of this study, the following recommendations are made:

1. Due to the limited scope of this study, the results obtained cannot be inferred to generalized population. However, the results proved to be interesting enough to suggest the importance in conducting a more comprehensive follow-up study. The investigator of this study
suggests to include in the follow-up study subjects from a cluster of kibbutzim and a wider range of age groups.

2. The difference in subjects' responses to a written testing device versus a graphic testing device might be considered in the design of a more comprehensive study in this area. The investigator advises that in order to effectively measure concepts such as the ones observed in this study, both verbal and graphic testing devices should be used.

3. In rating the DAF Tests, raters for this study were asked to judge two separate clusters of drawings. Even though the raters did not know which of the clusters was produced by which subject group, the researcher believes that a better method for drawings distributions to raters should have been employed. It is recommended that future studies of this nature will eliminate clustering of drawings according to subject groups and will rather present them to the raters in a mixed way.

4. The researcher also recommends that information about each subject's grade will be requested in the information sheet (see Appendix A) of future studies of this nature.
REFERENCES


Gerson, M. *On the stability of the family in the kibbutz (Hebrew).* *Megamot,* 1966, 14, 395-408.

Golan, S. *Studies of the kibbutz (Hebrew).* Tel Aviv: Sifriyat Poalim, 1961.


Kohlberg, L. *The development of modes of moral thinking and choice in the years 10 to 16.* Chicago, 1958.


Leon, D. *The kibbutz—a portrait from within.* Tel Aviv: Israel Horizon and World Hashomertatzair, 1964.


Torrance, E. P. Explorations in creative thinking in the early school years, I-XII. Minneapolis: Bureau Educ. Research, Univ. of Minnesota, 1959.


APPENDIX A

Information Sheet

Child's name
Age
Sex
Address
Parents' occupations
Parents live together Yes No
Child lives with natural parents Yes No
Number of brothers and their age
Number of sisters and their age
Extra information about the child or his family:

Child's comments about his drawing (when questioned by tester):
The following statements are designed to have you choose people you need in different circumstances in your life. Write your answer along side the question.

A = teacher or metapelet, B = children from my class, C = my father and my mother, D = people in my kibbutz.

1. When I feel bad, I prefer to talk about it with:
2. I feel that I am a child of:
3. When I have problems, I prefer to discuss it with:
4. I feel that I most belong to:
5. I feel most comfortable when I am with:
6. I feel closest to:
7. I prefer to be with:
8. It seems to me that the people who care most about me are:
9. In the happiest moments of my life I am with:
10. When I want to confide in someone, I go to:
11. I feel that those who love me the most are:
12. Those I love the most are:
13. Those that understand me the most are:
14. Where do you feel better:
   a. the parents' home:
   b. the children's home and classroom:
APPENDIX B

Family Concept Scale
(For city children)

The following statements are designed to have you choose people you need in different circumstances in your life. Write your answer along side the question.

A = teacher, B = children from my class, C = my father and my mother, D = people in my neighborhood.

1. When I feel bad, I prefer to talk about it with:

2. I feel that I am a child of:

3. When I have problems, I prefer to discuss it with:

4. I feel that I most belong to:

5. I feel most comfortable when I am with:

6. I feel closest to:

7. I prefer to be with:

8. It seems to me that the people who care most about me are:

9. In the happiest moments of my life I am with:

10. When I want to confide in someone, I go to:

11. I feel that those who love me the most are:

12. Those I love the most are:

13. Those that understand me the most are:

14. Where do you feel better:
   a. the parents' home:
   b. school:
APPENDIX C

Scale of Self-Concept in Relation
to the Family Unit

The following series of items are statements about yourself and your family. Please read it carefully before answering. You may choose between yes or no. Circle the word that best represents your true feelings.

15. Usually I love myself. Yes No
16. Usually I love my family. Yes No
17. Usually I love my father. Yes No
18. Usually I love my mother. Yes No
19. Usually I am satisfied with myself. Yes No
20. Usually I am satisfied with my family. Yes No
21. Usually I want to be with my family. Yes No
22. I feel that my father loves me. Yes No
23. I feel that my mother loves me. Yes No
24. I feel that my parents care for me. Yes No

Place: 

Child's name:
APPENDIX E

Yes No 1. Does overall feeling projected from the drawing (cohesiveness, smile, touch, environmental, centralization, etc.) express positive family concept?

Yes No 2. Are all family members represented in the family drawing (compare with information page)?

Yes No 3. Did the child represent himself in the drawing?

Yes No. 4. Is the father represented in the drawing?

Yes No. 5. Is the mother represented in the drawing?

Yes No 6. Does placement of self in relation to other family members express positive feelings about the self (placement as a part of the family unit—size in proportion to other family members)?

Yes No 7. Are there positive indications for child's assessment of father's role in relation to the family unit (placement, size, presence, facial expression, direction, type of interaction)?

Yes No 8. Are there positive indications for child's assessment of mother's role in relation to the family unit (placement, size, presence, facial expression, direction, type of interaction)?

9. Did the child avoid the use of exaggeration, diminishing, or eliminating parts of the body on:

   Yes No self?

Yes No 10. father?

Yes No 11. mother?

In the following questions, there is a possibility of more than one answer. Circle each answer and number them according to estimated closeness.

12. Where is the child in relation to other figures?

   Center of family       Apart or separated       By the mother
   By father              By siblings              Not present
13. Where is the father in relation to other figures?
   Center of family   Apart or separated   By the mother
   By child           By siblings            Not present
14. Where is the mother in relation to the other figures?
   Center of family   Apart or separated   By the father
   By child           By siblings            Not present
## APPENDIX F

### Responses of City Children to the Written Attitude Test

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109
Code

In all questions:
- = no response
In Questions 1 through 13:
  1 = Preference of teacher
  2 = Preference of children from the class
  3 = Preference of father and mother
  4 = Preference of people in the neighborhood
In Question 14:
  1 = The parents' home
  2 = Class and school
In Questions 15 through 24:
  1 = Yes
  0 = No
Code

In all question:
- = no response

In Question 1 through 13:
1 = Preference of teacher
2 = Preference of children from the class
3 = Preference of father and mother
4 = Preference of people in the neighborhood

In Question 14:
1 = The parents' home
2 = Class and school

In Questions 15 through 24:
1 = Yes
0 = No
## Responses of Kibbutz Children to the Written Attitude Test

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## APPENDIX H

### Analysis of DAF Test Produced by City Children

| Question No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 14 |
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|              | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
|              | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
|              | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  |
|              | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1  | 1  | 0  | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
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| Total Yes    | 5 | 5 | 15 | 9 | 9 | 9 | 9 | 4 | 6 | 5  | 4  | 4  | 3  | 3  | 1  | 5  | 9  | 9  | 0  | 1  | 3  | 3  | 2  | 16 | 1  | 3  | 3  | 1  | 4  |
| Total No     | 19 | 19 | 19 | 15 | 15 | 15 | 20 | 19 | 19 | 20  | 20  | 20  | 21  | 21  | 23  | 19  | 15  | 15  | 24  | 23  | 21  | 22  | 8  | 23  | 21  | 23  | 20  | 8  |
| Code:        | 1 = Yes                       |
|              | 0 = No                        |
### APPENDIX I

Analysis of DAF Test Produced by Kibbutz Children

| Question No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
|--------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Total Yes   | 15| 20| 25| 21| 19| 17| 17| 15| 13| 13 | 8  | 9  | 8  | 21 | 2  | 8  | 9  | 10 | 10 | 12 | 14 | 14 | 19 | 24 | 18 | 19 | 6  | 25 | 26 | 29 | 18 | 17 | 23 | 19 | 27 | 9  | 18 | 13 | 20 |
| Total No    | 12| 7  | 2  | 6  | 7  | 8  | 10 | 10 | 12 | 14 | 14 | 19 | 24 | 18 | 19 | 6  | 25 | 26 | 29 | 18 | 17 | 23 | 19 | 27 | 9  | 18 | 13 | 20 |

Code:

1 = Yes
0 = No
VITA

Name: Rachel Tal
Birthplace: Kibbutz, Bait Alfa, Israel
Birthdate: February 25, 1942
High School: Bait Alfa, Israel
College: 1965-1966
ORANIM
Kibbutz Teacher's College, Israel
B.S. degree in Art Education: 1968-1971
University of Minnesota
Minneapolis, Minnesota
M.S. degree in Art Education: 1972-1974
University of Utah
Salt Lake City, Utah
Ed.D. degree in Supervision and Instruction in Education: 1976-1979
Utah State University
Logan, Utah