1996

The Kinetic Family Drawing as a Measure of Minuchin's Structural Family Concepts Among Hispanic American Families With Substance-Abusing and Nonsubstance-Abusing Adolescents

José Osorio-Braña
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THE KINETIC FAMILY DRAWING AS A MEASURE OF MINUCHIN'S STRUCTURAL FAMILY CONCEPTS AMONG HISPANIC AMERICAN FAMILIES WITH SUBSTANCE-ABUSING AND NONSUBSTANCE-ABUSING ADOLESCENTS

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

By
José Osorio-Braña
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A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

José Osorio-Braña

APPROVAL BY THE COMMITTEE:

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ABSTRACT

THE KINETIC FAMILY DRAWING AS A MEASURE OF MINUCHIN'S STRUCTURAL FAMILY CONCEPTS AMONG HISPANIC AMERICAN FAMILIES WITH SUBSTANCE-ABUSING AND NONSUBSTANCE-ABUSING ADOLESCENTS

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Name and degree of faculty chair: Donna J. Habenicht, Ed.D.

Date completed: June 1996

Problem

There is a need for validation of new cultural-sensitive tests for assessing the Hispanic population in the United States that will take into account their cultural competence in the psychological evaluation practice. The purpose of this study was to explore the suitability of the Kinetic Family Drawings as a measure of Minuchin's Structural Family Theory among Hispanic American families with substance-abusing and nonsubstance-abusing adolescents.
Method

The Kinetic Family Drawing (KFD), the Structural Family Interaction Scale-Revised (SFIS-R), and the Family Adaptability and Cohesion Scales (FACES II) were administered to 141 families, 74 with an adolescent with substance-abusing problems and 67 with nonsubstance-abusing adolescents. Both groups, the clinic and non-clinic, included a total of 260 people involved in the study. All subjects were Hispanic Americans living in Chicago, Illinois, and Southern Michigan. Fourteen hypotheses were tested, and data were analyzed by multiple linear regression analysis, canonical correlation analysis, t-test, and by discriminant analysis. Significance was set at .05.

Results

The results of this study give support to the validity of the KFD in assessing some variables of Minuchin's Structural Family Theory. Of 37 KFD variables designed for this study, 25 (67.5%) found some confirmation. However, other variables were not supported by the results.

The KFD appears to be suitable in the assessment of some of the Family Hierarchy variables, Family Boundaries variables, and Family Adaptability variables. The qualitative results did not provide, however, support for KFD Family Subsystems variables related to maladaptive coalitions.

The potential of the KFD to differentiate between
families with different styles of interacting is affirmed by this study. The results indicated that the KFD is able to differentiate family patterns of interaction between substance-abusing and nonsubstance-abusing Hispanic families under certain conditions. These differences are related to Family Hierarchy, Family Boundaries, and Family Adaptability variables. No differences were indicated in the Family Subsystem variables.

Conclusion

The results of the quantitative and qualitative analysis of this study provide support for the potential of the KFD to reflect the drawer's view of himself/herself within the family, his/her view of family members' functioning, his/her view of some family interpersonal conflicts, and his/her view about the differences between some successful and unsuccessful family interactive patterns in terms of Minuchin's Structural Family Theory.
To my father and mother, Cesáreo and Soledad, who taught me the meaning of family. And to my wife Alidá and children, Rubén, Dina, and Esmeralda, who helped me to deepen and enlarge the meaning of family life.
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Last, but not least, my heartfelt thanks goes to my wife, Alida, who not only supported and put up with me through challenges and difficult times, but shared her substantial intellectual and frank opinions to my study. As always, Alida has been my best critic and my most enthusiastic supporter. I also thank God for my children, Ruben, Dina, and Esmeralda, for believing in
me, for their unflagging support and love which helped
make my dream become reality.
Illicit drug use among the Hispanic population in this country is a serious problem (Nyamathi & Vasques, 1995; Soriano, 1995). Policy makers, law enforcement officials, and health care professionals have often declared this to be one of the most serious social and health concerns facing this community (De La Rosa, Khalsa, & Rouse, 1990). A national survey in 1985 showed Hispanic adolescents ages 12 to 17 not only as polydrugs users, but they had the highest rate of cocaine abuse compared to White and Black youth (Rouse, 1986). These minority youth are overrepresented in drug abuse arrests, alcohol-related deaths, and admission to treatment for alcohol, inhalants, heroin, and phencyclidine (PCD), and underrepresented in treatment programs (Flores-Ortiz & Bernal, 1990).

Adolescent substance abuse has been associated in the literature with poor parental-child relationships, maladaptive interactional patterns in the family, disorganized family system, socioenvironmental factors, and ethnic issues (Glynn, 1981, 1984; Kaufman, 1985a, 1986; Rio, Santisteban, & Szapocznik, 1990; West, Hosie, & Zarski,
1987). Studies in which youth drug abusers rated their family functioning reported that their families were characterized by distant relationships, communication problems, low cohesion and flexibility, mistrusting and critical parenting, and many stressful events (Carvalho, Pinsky, Silva, & Carlini-Cotrim, 1995; Friedman, Utada, & Morrissey, 1987; Kandel & Andrews, 1987; Needle, McCubbin, Lorence, & Hochauer, 1983; Needle, Su, Doherty, Lavee, & Brown, 1988; Stoker & Swadi, 1990).

Over the past years, family therapy has become acknowledged as an effective treatment of choice for problems related to drug-abusing adolescents (Cleveland, 1981; Kaufman & Kaufman, 1979; Stanton, 1979). In a national survey of 2,012 agencies offering services for substance abusers, 93% of those responding indicated family-therapy to be a treatment of choice with drug abusers. The three family therapy theoreticians who were most influential were, by rank, Virginia Satir, Jay Haley, and Salvador Minuchin (Coleman & Davis, 1978). According to Szapocznik, Kurtines, Santisteban, and Rio (1990), Salvador Minuchin's Structural Family Therapy was a suitable approach for work with Hispanic American children and adolescents with drug abuse problems.

With the growing interest in family therapy as an effective treatment for drug problems has come the need for validation of new assessment tools in order to provide mental health care clinicians and counselors with descriptive
information about family functioning that can be used both in diagnosis and treatment plans (Fisher, 1976; Gurman & Kniskern, 1978, 1981). In particular, some investigators considered essential to validate clinically relevant tools for assessing family inter-actional patterns rooted in family systems theory (Epstein, Baldwin, & Bishop, 1983; Grotevant & Carlson, 1987; Wilkinson, 1987). According to Cromwell, Olson, and Fournier (1976), relevant family assessment instruments should have a theoretical framework, should require minimal time to administer, and should be appropriate for various ethnic groups.

**Statement of the Problem**

There is a need for validation of new culture-specific tests for assessing the Hispanic population in the United States that will take into account their cultural competence in the psychological evaluation practice (Dana, 1995).

The 1992 APA Ethical Code urges practitioners to become responsible for developing their own cultural competence in assessment practice (American Psychological Association [APA], 1992). Cultural competence in assessment of Hispanics requires an understanding of the client's cultural history and beliefs, particularly health-illness beliefs, and includes use of culturally acceptable service delivery style, appropriate language skills, delineation of cultural identity status prior to service, and knowledge of
culture-specific tests (Dana, 1995).

To ensure cultural competence for ethical assessment of Hispanic Americans in a multicultural society, it also is essential to stress the need of developing culture-sensitive reliable and valid clinical instruments for personality and family assessment of Hispanic minority populations, including projective techniques (Avila-Espada, 1986; Cervantes, Padilla, & Salgado de Snyder, 1990; Costantino, Malgady, Casullo, & Castillo, 1991; Malgady, Costantino, & Rogler, 1984; Padilla, 1979). Problems associated with traditional assessment instruments that have been used for years with various Hispanic populations have been well documented in the literature by various studies (Cervantes & Arroyo, 1995; Cervantes & Castro, 1985; Cervantes et al., 1990; Dana, 1995; Del Castillo, 1970; Fabrega, 1995; Green, 1987; Le Vine & Padilla, 1982; Lefley & Pedersen, 1986; Malgady, Rogler, & Costantino, 1987; Marin, 1992; Marin & Marin, 1991; Mezzich, 1989; Olmedo, 1979, 1981; Padilla & Ruiz, 1973; Rogler, Malgady, & Rodriguez, 1990; and Sabin, 1975).

Some of these problems include inappropriate use of normative data obtained with non-Hispanic samples for generating diagnostic categories with Hispanics, defective translation of instruments into Spanish, inappropriate test tool items, bias in clinical judgment, inaccurate assessment and diagnosis because of cultural factors,
inappropriate language skills and lack of delineation of cultural identity status prior to services.

Thus, there is a need to offer culturally valid psychometric testing procedures with this group. It appears that neglect still applies today to projective and drawing techniques (Dana, 1995; Esquivel, 1992). In particular, there are no data substantiating the validity of the Kinetic Family Drawing (KFD) (Burns & Kaufman, 1970) for use with this population. The existing literature does not offer any study which has examined the suitability of the KFD as a measure of Minuchin's (1974) Structural Family Theory among the Hispanic American families with substance-abusing and nonsubstance-abusing adolescents (Esquivel, 1992; Fabrega, 1995; Padilla, 1992; Rogler et al., 1989; Rueschenberg & Buriel, 1995).

**Purpose of the Study**

The primary purpose of this study was to explore the suitability of the KFD technique as a measure of Minuchin's (1974) Structural Family Theory among Hispanic American families with substance-abusing and nonsubstance-abusing adolescents.

A secondary purpose of this study was to identify differences in the Structural Concepts of Family Functioning of the Hispanic American families under study, by comparing families with substance-abusing adolescents with families of nonsubstance-abusing adolescents, using
Minuchin's basic constructs of family structure.

Research Question

This study sought to answer the following questions:

1. Is the KFD a valid instrument for assessing the structural concepts of family functioning of Hispanic American families according to Minuchin's Structural Family Theory?

2. Are there differences in the perceptions of structural concepts of family functioning among Hispanic American families with substance-abusing or nonsubstance-abusing adolescents as revealed in their Kinetic Family Drawings and their scores on the Structural Family Interactions Scale-Revised (SFIS-R) and the Cohesion and Adaptability Scales of FACES II?

Hypothesis

It was hypothesized that the KFD was a valid procedure to use in evaluating Minuchin's structural concepts of family functioning among Hispanic American families as revealed in their drawings. It was further hypothesized that families with substance-abusing adolescents and nonsubstance-abusing adolescents would reveal in their drawings different interactive patterns of functioning according to Minuchin's (1974) basic Structural Family Theory. Both groups were evaluated using the KFD, SFIS-R, and FACES II scores.
Theoretical Framework

The conceptual framework for this research project includes Minuchin's Structural Family Theory as well as the projective basis for using drawings as assessment measures.

Structural Family Therapy Model

Background of the Approach

The family therapy movement has produced a large number of theories and conceptual models of family functioning, dysfunctioning, and therapeutic change. The Structural Family Therapy model developed by Minuchin and his associates (Minuchin, 1974; Minuchin & Fishman, 1981) has emerged as perhaps the most influential model in the field. It provides a clearly articulated theory with a concrete conceptual framework map that brings order and meaning to structural family interactional patterns in a systematic and organized fashion (Nichols & Schwartz, 1991). This approach encompasses both a conceptual model of families and an applied model of intervention with families.

The Structural Family Therapy approach was developed initially by Salvador Minuchin, M.D., and his colleagues in the 1960s as they worked with disadvantaged Puerto Rican and Black youngsters and their families at the Wiltwyck School, New York (Minuchin, 1982).

Subsequently, the structural approach was refined
and extended in work at the Philadelphia Child Guidance Clinic through research studies conducted under Minuchin's direction and his intellectual association with Jay Haley, Braulio Montalvo, Harry Aponte, Cloe Madanes, Charles Fishman, Tom Todd, and other prominent professionals, all of whom have had an important role in shaping Structural Family Therapy. However, the prominence of Structural Family Therapy is due in part to Minuchin's reputation as a master clinician and to the fact that his model is both simple and practical (Minuchin, 1987; Nichols & Schwartz, 1991).

His book, *Families and Family Therapy*, models effectively functioning families and families seeking therapy, analyzes why families develop problems, and describes diagnostic methods or "mapping" problems as well as the therapeutic goals and strategies. His two books, *Families of Slums* and *Psychosomatic Families* describe conditions of these families in trouble. His approach is clearly delineated, teachable, and effective (Perosa, 1980).

**Basic Structural Constructs**

Minuchin (1992) sees the family as an interactive and interdependent Structural System that has distinctive properties and operation matrix. His conceptual schema of family functioning, operating within specific social context, has three components. First, the structure of the family is an open sociocultural system in
transformation. Second, the family undergoes development, moving through a number of stages that require restructuring. Third, the family adapts to changed circumstances to maintain continuity and enhance psychosocial growth of family members (Minuchin, 1974).

The approach focuses on the family structure—that is, the family's repetitive patterns of interaction within the family system. Thus, the family structural system is not defined by family composition but rather by the invisible set of functional demands that organizes the ways in which family members interact and operate through repeated transactional patterns of how, when, and to whom family members relate. These transactional patterns regulate family members' behavior, needs, and expectations (Minuchin, 1974).

In assessing structural processes of family functioning, this model takes into consideration the following structural processes of family functioning: family hierarchy, family subsystems, family boundaries, and family adaptability. Because these concepts are central to our understanding of families as structural system, as well as to the purpose of this study, the following sections briefly describes each one of these important structural constructs.

The Family Hierarchy construct is concerned with the distribution of authority and responsibility within the family structural system. A family system functions best
when parents operate as the executives and children function at a different and less powerful generational level. In order for this to occur, it is of paramount importance that the parents operate as a cohesive unit, supporting one another and providing the necessary control, guidance, and nurturance of children (Minuchin, Averswald, King, & Rabinowitz, 1964; Rosenberg, 1983). In functional families, there is a coalition between parents, and the children grow up knowing that the parents will stick together. The parental power is clear, and competing parent-child coalitions are absent (Finley, 1983).

Generally, if the children are setting the rules in the family or are successfully disregarding their parents' guidance and rules, they are in control of the parents' functions. This is considered generational hierarchy reversal and the natural authority of the family is upside down (Wood & Talmon, 1983). The inversion of power in hierarchies is often labeled as the single most destructive force in a family's structure system (Umberger, 1983). In families that function harmoniously, the subsystems of the group coexist within hierarchical structure with the distribution of power going from top to bottom (Oster & Gould, 1987).

Thus, the authority and leadership of the family are concerned with the following questions: Who takes charge of the family's responsibility? Is leadership in the appropriate hands? Is hierarchy
appropriate with respect to age, role, and function? (Szapocznik, Kurtines, & Contributors, 1989).

The Family Subsystems construct is concerned with the way in which the family members organizes, interacts, resolves conflicts, and form possible faulty alliances across generations involving parent–children in alignments such as triangulations, coalitions, or detouring issues. Thus, family subsystem organization, proximity, degree of family members centralization, isolation or separation of family members, boundaries demarcations and rigid collusions are all relevant concepts in the present study.

According to Minuchin (1974, 1976, 1992) the family is a living system that operates through transactional patterns and differentiates and carries out its functions through subsystems. Each individual belongs to different subsystems—such as spouse, parental, or sibling subsystems—in which he/she has different levels of authority and plays different roles (i.e., wife, mother, son, daughter) (Minuchin & Minuchin, 1976; Minuchin, 1985).

In order for a family to function satisfactorily, each subsystem, be it marital, parental, or sibling, and each person within his respective system, must have space. The spouse subsystem should protect the couple from intrusion by children or by adult members of the extended family. The parental subsystem allows the
parents to make their decisions and keep the authority in their hands. The siblings subsystem allows the children the opportunity to learn cooperation, competition, autonomy, changing roles, and social and developmental skills without parents' interference (Minuchin, 1974).

In a proper family functioning, the boundaries of subsystems must be clear; each subsystem must be free of interference by other subsystems' members. When there are inappropriate cross-generational patterns and one person enters overwhelmingly into the life-space of another, or when one is totally uninvolved with the affair of another family member, dysfunction occurs. The notion of clarity of boundaries between the subsystems is associated with problems of enmeshment and disengagement (Minuchin, 1974; Minuchin & Fishman, 1981).

Thus, the Family Subsystem organization is concerned with the following questions: Who supports whom? Are dyad members closer to each other than to the rest of the family? Are alliances appropriate? Are there triangulations within and across subsystems? Who is a member of which subsystem? Are subsystems comprised appropriately as to age and function? Are subsystem boundaries clearly defined? Are conflicts between family members unresolved and detour away from the original problem? (Szapocnik et al., 1989).

The Family Boundary construct is concerned with the implicit or explicit rules regarding who is in and
who is out of the system operation and with the
differentiation of subsystem (Minuchin, 1974). The
family boundary may serve as a gatekeeper function,
controlling interactions and communication flow into and
out of the system. Thus, boundaries help safeguard each
subsystem autonomy while maintaining the adequate
interdependence and differentiation (Goldenberg &

Gumaer (1984) described boundaries as invisible
guidelines which define relationships among the family
members. Wood and Talmon (1983) see Minuchin's notion of
boundary as interchangeable with the concept of distance
and space to characterize one aspect of family structure,
specifically the physical and psychological interpersonal
relatedness, or proximity of family members. Szapocznik
et al. (1989) associated boundaries with the emotional
distance between family members and the differentiation
that takes into account each family member's sensitivity
to the others. Boundaries also have been related to
space configurations such as closeness/distance,
inclusion/exclusion, fluid/rigid family arrangements
(Calapinto, 1988).

Minuchin (1974) conceives of all families as
falling somewhere along a continuum whose poles are the
extremes of enmeshed (diffuse boundaries) and disengaged
(rigid boundaries). Most families fall within the wide
normal range. (See Fig. 1.)
DISENGAGED | CLEAR BOUNDARIES | ENMESHED
(Inappropriately rigid boundaries) | (Normal range) | (Diffuse boundaries)

Fig. 1. Minuchin continuum.

Thus, boundaries can be viewed as being on a continuum from enmeshed to disengaged. Both extremes may indicate potential pathological areas. An enmeshment occurs when boundaries among family members are blurred and members are overly involved. Members of enmeshed systems or subsystems may include such behaviors as constant interruption among family members or one family member always speaking for another. This often stifles growth, development, differentiation, and autonomy. Boundaries are crossed and a separate sense of self and differentiation is never learned or experienced (Minuchin, 1972). In healthy families, however, individuals are able to balance a sense of personal identity and separateness with a sense of group belonging. If these essential skills and sensitivities are impaired, a person cannot develop a repertoire of adaptive life skills or establish a new identity apart from the family of origin (Jones & Butman, 1991).

The opposite can occur when boundaries are too rigid. In this condition, a wall of isolation, and separateness, characterized family interactions.
Disengaged families do not care enough. They are perceived as low on interpersonal contact, resulting in low levels of cooperation, nurturance, and support. Disengagement precludes interdependence, while enmeshment is believed to preclude autonomy. Differentiation and individuation becomes extremely difficult in such families (Minuchin, 1974; Oster & Gould, 1987; Perosa, 1980; Wynne, Ryckoff, Day, and Hirsch, 1958). Careful judgment is needed, however, in determining the appropriateness of closeness and separateness in parenting roles and tasks. For example, a family with young children is normally more enmeshed and becomes more disengaged when the children become adolescents.

As Minuchin (1974) has cautioned, it is important to recognize that neither enmeshment nor disengagement is regarded as either "healthy" or "pathological." It is useful to view these conditions as predisposing the family system to difficulties in responding to new demands, while playing a more adaptive role in other situations. Enmeshed systems, for example, react poorly to conditions requiring personal autonomy and often go into crisis around transitions such as leaving home (Todd, 1986).

Thus, the Family Boundaries are concerned with the following question: Are the boundaries too permeable or nonexistent? Are family boundaries extremely rigid or impermeable? Is the interaction and communication possible and appropriate, while retaining adequate
differentiation and separateness? Do individuals communicate directly with each other? Who controls the communication flow? Is there a family member who speaks for others in the family or for the whole family? (Szapoznik et al., 1989).

Family Adaptability construct is concerned with the degree to which the family structure is flexible and able to change. This adaptation process is related to the family system and subsystems ability of realignment its distribution of power structure, role functions, rules interactions, and responses to new life conditions and developmental changes.

The Family Structure must be able to adapt its interactions and patterns when circumstances change. This is particularly important with adolescents. As the child grows, his developmental demands for both autonomy and guidance impose demands on the parental subsystem, which must be modified to meet them. The parental subsystem must adapt to the new factors impinging on the tasks of socialization. Parents are expected to be flexible and to understand children's developmental needs and to explain the rules they impose. The adolescents should move a little away from the siblings' subsystems and give increased autonomy and responsibility appropriate to his age. The parental subsystem's transactions with him should change from parent-child to parent-young adult (Minuchin, 1974; Minuchin & Minuchin, 1976).
Minuchin's (1974) conceptual schema of adaptability also involved the family ability to change and adjust to stress and conflicts. He identified the following four major sources of stress: a family member's stressful contact with extrafamiliar forces; the entire family's stressful contact with extrafamiliar forces; stress at transitional points in the family life cycle; and the stress around idiosyncratic problems. Each source of stress is different, and the effects depend on the family's ability to adapt so restructuring may occur. Families can respond to stress with rigidity, fighting, avoiding the issues, or accommodating their differences and being flexible.

Flexibility is concerned with family interactions, alignments, appropriateness of shifts of communication flow, conflict resolution, and ability to meet new challenges. Flexibility is the sine qua non of adaptiveness whereas lack of flexibility or rigidity is the sine qua non of maladaptiveness (Minuchin, 1974; Szapocznik et al., 1989). A family that cannot change will sooner or later develop family problems, which generally are blamed on a child who is defined as the only family problem. In Minuchin's model this child is also known as the identified patient (IP).

The identified patienthood (IP) plays an important role in the family conflict avoidance and as a means of maintaining family stability or homeostasis.
(i.e., the current balance). The IP refers to the extent to which the family considers that their problem is the fault of the person exhibiting the symptoms. Typically, the sick child serves as a useful conflict avoidance detouring route, who is now defined as the sole cause of family pain and unhappiness. The child is viewed as serving a homeostatic function for the marital conflicts (Minuchin et al., 1975; Minuchin, Rosman, & Baker, 1978; Perosa, 1980).

Thus, adaptation is concerned with the following questions: Is there flexibility in this family? Do they respond well to the challenge of change? Do members freely support each other in response to the stimulus, conflict negotiation, or issues at hand, rather than interacting with each other in terms of fixed roles within the family? Are there proper realignments and nurturant functions in accord with a child's/adolescent's age and task of psychological development?

In summary, Minuchin's Model provides a framework that helped to conceptualize the structural dimensions of family functioning. In functional families, the hierarchy distribution is well defined and parents support one another and provide control, guidance, and protection to the children. The subsystems within the family are separated, and the interaction across boundaries are governed by implicit rules and patterns. The boundaries which protect the differentiation of the
system are clear. A healthy family system is able to adapt to new conditions of stress and developmental stages. In dysfunctional families, however, four main characteristics emerged in Minuchin's Psychosomatic Model: enmeshment, overprotectiveness, rigidity, and lack of conflict resolution.

Although Minuchin's Model has been widely supported and used in family therapy and research studies, it has also been criticized because it provides a mechanistic paradigm of the family, rather than a humanistic view. Specifically, his concept that symptoms always serve a function in the system and the question of behavioral changes producing perceptual changes, has been confronted from a humanistic perspective. According to this view, symptoms often serves a function in the system but not always; and, people can experience problems and situations differently, but it may not be a significant difference. In addition, this humanistic view suggests the need for a model which takes more into account human characteristics such as imagination, creativity, and the ability to perceive (Papp, 1986).

**Description of Dysfunctioning Structures**

Minuchin's research and interventions with psychosomatically ill children have led to the development of a conceptual model of the structural functioning of such families. This model has been useful
in predicting dysfunctional patterns of family process in cases of anorexia nervosa, chronic asthma, psychogenic pain, and other psychosomatic disorders (Minuchin, et al., 1975; Minuchin et al., 1978). The investigations have been interpreted as a general nonspecific validation of the structural theory constructs for all psychosomatic families (Aponte & VanDeusen, 1981).

The psychosomatic research project was based upon an open or circular system model. This circular causality model was considered a more effective guide for exploring family interaction patterns in psychosomatic families than the linear causality model, which retains the main focus on the individual (Minuchin et al., 1975; Minuchin, Rosman, & Baker, 1978).

Research governed by the linear model has followed two major directions: psychodynamic and psychophysiological. The former orientation was inspired by psychoanalytic theory and relied on psychoanalytic concepts and methods of observations. This preoccupation with the linear model led clinicians to focus on exploring intrapsychic processes under the assumption that pathology existed within the individual apart from his environmental influences. The most influential representative of this theory was Franz Alexander, which linked unresolved unconscious conflicts with specific somatic disorders and dominated the field from the mid-1920s until about 1955. The psychophysiological direction research focused on
illness as a biological phenomenon produced by an internal psychological or physical malfunctioning (Alexander, 1950; Minuchin, 1974; Perosa, 1980; Weiten, 1986).

As early as 1914, Ortega y Gasset (1961) stated that man is not himself without his circumstances. It was, however, the clinical work of Pinkerton (1967) with asthmatic and Selvini-Palazzoli (1970) with anorectic children that is considered a transitional change toward a new emphasis on international patterns of family functioning in the etiology of illness. Liebman, Minuchin, and Baker (1974), Minuchin (1974), and Minuchin et al. (1967, 1978) developed his open conceptual model with their research with diabetics, and asthmatic and anorectic families.

Minuchin's (1974) research approach followed two basic assumptions:

1. An individual psychic life is not entirely an internal process. The individual influences his context and is influenced by it in constantly recurring sequences of interaction. The individual who lives within a family is a member of a social system to which he must adapt.

2. Changes in a family structure contribute to changes in the behavior and the inner psychic processes of the members of that system.

In Minuchin's model, the individual is viewed within the family interactional context, not isolated from it. He acknowledged the repetitive patterns of
interaction between the family and the individual as determinants of health and illness. Thus, Minuchin's structural family functioning offers a new approach for examining the relationship between family interaction patterns, physical illness, family dynamics, and family functioning (Petrosa, 1980).

Minuchin et al.'s (1975) model holds that three factors in conjunction are necessary for the development of severe psychosomatic illness in children:

First, the child is physiologically vulnerable.

Second, the child's family is characterized by enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. The enmeshed family system is characterized by a high degree of intrusion on personal boundaries, poorly differentiated perceptions of the self and other family members, weak family subsystem boundaries, and confused executive hierarchies. Family members show a high degree of concern or overprotectiveness for each other's welfare. These families are heavily committed to maintaining a rigid status quo, functioning like a closed system without flexibility to change its rules and transactional patterns in ways that allow increased autonomy when children reach adolescence. And, finally, these psychosomatic families, with rigidity, overprotectiveness, and enmeshed transactional patterns are prone to conflict problems.

The third condition postulated in this model of
family functioning is that the ill child plays an important role in the family to perpetuate conflict avoidance. This is an important source of reinforcement for his symptoms, which function also as a homeostatic mechanism regulating family transactions.

Three dysfunctional patterns of involvement were found related to psychosomatic families and child position in parental conflict.

The first pattern, which Minuchin calls triangulation, involves a splitting of the spouses. The child is put in such a position that he or she cannot express himself or herself without siding with one parent against the other. In the second pattern, a parent-child coalition is formed, and the child tends to move into a stable coalition with one parent against the other. One mother, for example, was unable to express her rage over her husband's refusal to protect her from his mother's attacks. The sick son became deeply involved as his mother's protector and spokesman for her complaints, urging his father to protect her from her mother-in-law. Although the father tried to persuade his son to reject the mother's "childish" demands, the boy doggedly maintained his enmeshed "adult" stance. The third pattern, called detouring, is where the father and mother are united and submerge their conflicts by "protecting" or blaming their sick child, who is now defined as the only family problem. (See Fig. 2.)
Addiction researchers and clinicians have been seeking evidence of family correlates of substance abuse for some time. Some of these studies, influenced by Minuchin's research and his Structural Family Theory, have focused chiefly on maladaptive patterns of interaction (i.e., structures) in the family. Stanton (1978) and Stanton and Todd (1992) reported a major study conducted with families of drug addicts and a new conceptual model which sees contemporary family transactional processes as central determinants of drug abuse. Empirical studies by Kaufman and Kaufman (1979) and Zeigler-Driscoll (1977, 1979), among others, have also described families of drug addicts in terms which support this model. A number of studies with Hispanic American...
families also have shown that family structural disorders may lead to eventual substance abuse in adolescents (Santisteban, 1979; Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis, 1983, 1986; Szapocznik, Santisteban, Rio, Perez-Vidal, & Kurtines, 1989).

The literature has described the structure and functioning of families with substance-abusing adolescents as being a dysfunctional system, rigidly enmeshed, with blurred generational boundaries, a symbiotic mother-child relationship, and a lack of conflict resolution (Bartle & Sabatelli, 1989; Cleveland, 1981; Kaufman, 1981, 1986; Levine, 1985; Lewis, 1989; Volk, Edwards, Lewis, & Sprenkle, 1989; West, Hosie, & Zarki, 1987). Mothers most often are described as indulgent and overprotective (Harbin & Maziar, 1975). Fathers are considered as weak, ineffectual, distant, or absent (Coleman & Stanton, 1978).

In the literature, addictions are viewed as serving a homeostatic function for the family, a typical triangulation in which marital conflicts are detouring on a child. Drug problems are seen to develop most often as children move into adolescence, a time when the structure of the family system must adapt and deal with the autonomy and individuation of teenagers. The more enmeshed the family system, the more likely it is to have trouble letting the adolescent go (Austin, Macari, & Lettieri, 1979; Flores-Ortiz, & Bernal, 1990).
Assessing Structural Family System

In assessing Minuchin's family schemata, the family therapist focuses on the various facets of the family preferred transactional patterns in order to map its framework and decided therapeutic interventions. He/she evaluates the family's hierarchical organization, the flexibility of the subsystems organization to carry out their patterns of interactions without possible family alliances, coalitions, overinvolvement, and triangulations within and across subsystems in response to internal and external changes and needs.

Next he/she examines the degree of differentiation, resonance, and permeability of the boundaries and its extremes of enmeshment and disengagement. The notion of clear boundaries is the most important dimension in family evaluation used by Minuchin. Finally, he/she is interested in how the family adapts to developmental changes and tasks, unexpected situational crises, ability in dealing with conflict resolution, and the role that the identified patient's (IP) symptoms play in maintaining the repetitive patterns of interaction and family homeostasis (i.e., the current balance) (Goldenberg & Goldenberg, 1991; Minuchin, 1974; Perosa, 1980; Szapocznik, Kurtines et al., 1989). (See Fig. 3.)
In this assessment of the Structural Family system, Minuchin (1974) used a set of standardized stimuli called the Family Tasks designed to elicit family maladaptive interactional patterns and the Family Interaction Apperception Technique (FIAT) instruments. FIAT is a projective tool designed also to elicit projective responses concerning the family interactions and structural concepts that need to be addressed in treatment. Minuchin advocated the use of projective techniques as an essential component of the family evaluation and diagnostic procedure because they are less defensively distorted than conscious reports (Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967).

This assessment is vital to the therapist who is interested in identifying what is wrong or maladaptive within a family interaction system (structure) and changing them in such a way that those families may develop appropriate, successful, and adaptive patterns of
functioning. Accurate diagnosis and treatment rest on reliable assessment information (Szapocznik, Kurtines, et al., 1989). Table 1 presents for evaluation purposes the adaptive and maladaptive concepts associated with Structural Family Functioning adopted by the researcher.

**TABLE 1**

<table>
<thead>
<tr>
<th>Adaptive and Maladaptive Concepts Associated with Structural Family Functioning Adapted by Researcher</th>
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<tbody>
<tr>
<td><strong>Hierarchies</strong></td>
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<tr>
<td>Clear power hierarchy</td>
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<tr>
<td>Parents work as a team</td>
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<tr>
<td>Confused power hierarchy</td>
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<tr>
<td>Authority &amp; decision reversed</td>
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<tr>
<td><strong>Subsystems</strong></td>
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<tr>
<td>Effective subsystems membership</td>
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<tr>
<td>Clear couple/parental alliances</td>
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<tr>
<td>Resolution of conflicts</td>
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<tr>
<td>Firm generational boundaries</td>
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<tr>
<td>Confused interfamilial relations</td>
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<tr>
<td>Faulty alliances, triads</td>
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<tr>
<td>Lack of conflict resolution</td>
</tr>
<tr>
<td>Cross generational boundaries</td>
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<tr>
<td><strong>Boundaries</strong></td>
</tr>
<tr>
<td>Clearly defined boundaries</td>
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<tr>
<td>Adequate degree of closeness</td>
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<tr>
<td>Differentiation - individuation</td>
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<tr>
<td>Enmeshment/disengagement</td>
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<tr>
<td>Overinvolved and isolated</td>
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<tr>
<td>Undifferentiated families</td>
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<tr>
<td><strong>Adaptability</strong></td>
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<tr>
<td>Flexibility in the system</td>
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<tr>
<td>Ability to change &amp; adapt to stress</td>
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<td>Proper developmental shifts</td>
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<tr>
<td>Rigid patterns of relating</td>
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<tr>
<td>Inability to change &amp; adapt to stress</td>
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<td>Failure to adapt to new stages</td>
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Basis for Projective Drawings in Assessment

Drawings as Projective Techniques

Concurrent with the emerging interest in family therapy, interest in the use of projective drawings in the assessment process began to expand in the 1950s and 1960s. Projective research with human figure drawings (Goodenough, 1926; Goodenough & Harris, 1950; Harris, 1963; Koppitz, 1968; Machover, 1949) expanded to projective uses of House-Tree-Person drawings (Buck, 1948), and this in turn has fostered investigations into other projective drawing techniques such as Draw-A-Family (Hulse, 1951, 1952) and the Kinetic Family Drawing technique (Burns & Kaufman, 1970, 1972).

Projective techniques are assessment methods that are based on the principle of projection, broadly conceived (Chandler & Johnson, 1991; Cummings, 1986). Most of the projective measures are actually tests of mental mechanism or of personality dynamics (Anderson & Anderson, 1951). Projective theory assumes that the individual projects onto a task, behavior, or drawings certain aspects of his or her inner psychodynamics, personality process, and feelings state (Frank, 1948). In a sense, people are projecting all the time and expressing their mode of thinking, personal needs, motivations, and unique inner characteristics (Rabin, 1986).

Interpretation of projective drawings draws
heavily on psychoanalytic theory. One of the central assumptions of this procedure is that many important aspects of personality are not available to conscious self-report and thus questionnaires and inventories are of limited value. To obtain an accurate view of a person's inner themes, dynamics, and attitudes, it is necessary to somehow circumvent unconscious defenses and conscious resistances. From a psychoanalytic perspective, then, an indirect approach, such as through projective drawings, is essential (Groth-Marnat, 1990). Thus, drawings become nonverbal vehicles for expression of fears, inner conflicts, relationships concerns, and pathological conditions of a person's mind or psyche (Golomb, 1992; Oster & Gould, 1987). A drawing also is a piece of behavior (Schildkrout, Shenker, & Sonnenbuck, 1972).

Drawings as Assessment Tools

The use of drawing in the assessment process has evolved rapidly as an adjunct to aid in accurate assessment, diagnosis, and therapeutic interventions of individuals, families, and groups in both inpatient and outpatient settings. Because of their brevity, nonthreatening nature, ease of administration, and vast interpretation product, drawings are regarded as attractive tools by the clinicians as a part of the evaluation process (Oster & Gould, 1987).
Knoff (1986), in a review of the projective drawing literature, suggested that projective drawings have been useful for the following functions: to allow nonverbal children to express themselves, to gain an understanding of a child's personality from a psychodynamic perspective, and to serve as a starting point for further evaluation. Koppitz (1968) considered projective drawing a natural mode of nonverbal expression and communication for children.

Projective drawings have also become an excellent source for measuring family functioning. According to Oster and Gould (1987), the introduction of family drawings in the evaluation of family systems will help clinicians in the following ways: (1) to observe family interactions bypassing family members' defenses; (2) to promote freer expression of feelings in a nonthreatening way; (3) to evaluate maladaptive ways of communicating among family members; (4) to explore the alliances (i.e., dyads or triads) that may be inhibiting family functioning; (5) to assess family members' interaction changes in terms of the usual roles of the family hierarchy and flexibility; (6) to equalize age differences within the family system; and (7) to make goals for therapeutic interventions.

Since its introduction in 1970 (Burns & Kaufman, 1970) the Kinetic Family Drawing technique has become increasingly popular with both clinical and school
psychologists as a useful, easy, and quick tool for assessing perceptions of the interpersonal relations within the family (Mostkoff & Lazarus, 1983) as well as family system functioning. The KFD has also shown its applicability to assess family dynamics in cross-cultural populations and the ability to reflect cultural patterns and social values of diverse groups in the drawings (Burns, 1982; Cabacungan, 1985; Nuttall, Chieh, & Nuttall, 1988).

**Importance of the Study**

This research is important for several reasons. First, this study is the first to test the validity of the KFD as a viable tool for use in assessing Minuchin's Structural Family concepts among Hispanic American families. Second, an objective scoring system is proposed for use in assessing the Structure Concepts of the Hispanic family as revealed in their KFDs. And third, this study compares Minuchin's Structural Family Concepts among Hispanic American families with substance-abusing and nonsubstance-abusing adolescents.

**Delimitation of the Study**

Subjects for the sample of this study were delimited to Hispanic American families with adolescents between 12 and 20 years of age living in Illinois and Michigan who were willing to participate in this study.
Assumptions

The underlying assumptions of this study were:

1. Adolescents and adults can project unconscious feelings, conflicts, attitudes, beliefs, and reactions onto anything outside of the self, including drawings.

2. Culture is reflected in the family drawings.

3. The non-clinic families without substance-abusing adolescents have not had drug experience to require significant clinical intervention.

4. Test results and histories obtained from clinics related to substance-abusing adolescents were honest and truthful reports.

5. Adolescents ages 12 through 20 and their families were able to understand and follow the instructions of the questionnaire for this study.

6. Responses of the subjects to the questionnaire were honest.

7. Structural Family Theory is able to provide a conceptual framework for the evaluation of the structural functioning of Hispanic families.

Definition of Terms

The following terms are defined briefly as used in this study:

Acculturation. Those phenomena which result when groups of individuals having different cultures come into
continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups (Redfield, Linton, & Herskovitz, 1936).

**Alignment.** The way in which family members as individuals and as parts of subsystems relate to each other, other family members, and subsystems.

**Boundaries.** An abstract delineation between parts of a system or between systems, typically defined by implicit or explicit rules regarding who may participate and in what manner.

**Clinic group.** A family in which an adolescent has been diagnosed as having a substance-abusing problem and is under treatment in a clinical facility.

**Circular causality.** The view that causality is nonlinear, occurring instead within a relationship context and by means of a network of interacting loops; any cause is thus seen as an effect of a prior cause, as in the interactions within families.

**Cross-generational coalition.** An inappropriate alignment between a parent and child, who side together against a third member of the family.

**Culture.** The mode of thought, behavior, and production that is passed from generation to generation by way of communicative integration. The three major dimensions are: (1) ideas (ways of thinking that organize consciousness); (2) norms (accepted ways of doing or carrying out ideas); and (3) material culture (patterns of
processing and using the products of culture) (Kornblum, 1991).

**Disengagement.** A family organization with rigid boundaries, in which members are isolated and feel unconnected to each other, each functioning separately and autonomously and without involvement in the day-to-day transactions within the family.

**Detouring coalition.** A mother-father-child triad in which conflict between the parents is avoided or rerouted by focusing attention or blaming the child, who is defined as the only family problem.

**Dyad.** A liaison, temporary or permanent, between two people.

**Enmeshment.** A family organization in which boundaries between members are blurred and members are overconcerned and overinvolved in each other's lives, making autonomy impossible.

**Ethnic group.** A group of people possessing features that make it distinctive from the larger culture of which it is a part.

**Family drawings.** A projective method whereby family members are asked to make pictures; representations of the family as it is organized.

**Hispanic Americans.** Hispanic is a generic term that refers to all peoples of Spanish origin who reside in the United States or descend from other Spanish-speaking countries such as Mexico, Puerto Rico, Cuba, Dominican
Republic, Central America, or other South American countries. Some groups preferred the name Latino, a Spanish word indicating Latin American origin. Another widespread term is La Raza, which refers to the multicultural background of Hispanics who, to some degree share a social and cultural legacy of Spain, native Indians, and African people (Bernal, Bernal, Martinez, Olmedo, Satisteban, 1983).

**Index Patient (IP).** The clinic family substance-abusing adolescent or his or her age and sex-matched counterpart in a nonclinic family.

**Linear causality.** The view that a nonreciprocal relationship exists between events in a sequence, so that one event causes the next event, but not vice versa.

**Nonclinic group:** A family in which all members are reported to be free of substance-abusing problems.

**Parent-child coalition.** A split occurs between the parents, and the child enters into a stable alliance with one parent against the other.

**Projective techniques.** Assessment tools which, because of their unstructured nature, evoke from the subject expressions of his or her private world and personality process.

**Structural Family Therapy.** A family therapy approach identified with Minuchin, directed at changing the family organization or structure in order to alter behavior patterns in its members; the therapist changes
the system by actively participating in its interpersonal transactions.

**Substance abuse.** Psychoactive drug use of any class or type, used alone or in combination, that poses significant hazards to health.

**Subsystem.** An organized, coexisting component within an overall system, having its own autonomous functions as well as a specified role in the operation of the large system; within families, a member can belong to a number of such units.

**System.** A set of interacting units or component parts that together make up a whole arrangement or organization.

**Triad.** A three-person relationship.

**Triangulation.** A process in which each parent demands that a child ally with him or her against the other parent during parental conflict; the child feels caught in the middle.

**Organization of the Study**

Five chapters are contained in this study.

Chapter 1 includes the introduction, statement of the problem, purpose of the study, research questions, hypothesis, theoretical framework, importance of the study, delimitations of the study, assumptions, definitions of terms, and an organization of the study.

Chapter 2 reviews the literature on the Kinetic
Family Drawing, the Hispanic American family, and the family context of adolescents' substance abuse.

Chapter 3 describes the type of research, population sampling procedures, instrumentation, data collection, null hypotheses and statistical analysis.

Chapter 4 outlines the findings and the interpretation of the results.

Chapter 5 presents a summary of the study, discussion of the results, conclusions, implications of the findings, and recommendations for further research.
CHAPTER II

REVIEW OF THE LITERATURE

The review of literature includes three sections. The first section is an overview of the Kinetic Family Drawing technique, which includes its historical background, development, reliability, validity, cross-cultural studies, and studies relevant to this study. The second section is a review of the literature of Hispanic American families and includes sections related to their historical background, general demographic characteristics, cultural family patterns, structural family systems and functioning, acculturation, biculturalism and adjustment, and family therapy help-seeking patterns. The third section reviews the family context of adolescents' substance abuse and includes the following sections: background, incidents and trends of adolescents' substance abuse, family interactions of adolescent substance abuse, and ethnicity, acculturation, and adolescents' substance abuse.

The Kinetic Family Drawing

Historical Background

In 1926 Florence Goodenough introduced the use of human figure drawings in the evaluation of children's
intelligence. A child was asked to draw a person and the drawing was scored for mental age by a quantitative method. But Goodenough, along with other clinicians, soon became aware that her "Draw-A-Person" (DAP) test was not only tapping intellectual capabilities but personal and emotional factors as well (Hammer, 1968). Since then, the human figure drawing has been widely used as a clinical tool for the measurement of cognitive and personality variables (DiLeo, 1970, 1973, 1983; Harris, 1963; Koppitz, 1968; Machover, 1953, 1980).

In 1948, John Buck announced the development of the House-Tree-Person (H-T-P) technique. The subject was asked to draw a house, a tree, and a person. Buck's H-T-P procedure grew out of an intelligence scale which he was working on at the time Wechsler came out with his Intelligence Scale. Although he was initially interested in the assessment of intelligence, he found that personality factors were "flooding of the drawings" (Hammer, 1968, p. 367). Buck used the test in obtaining information concerning the sensitivity, maturity, flexibility, and personality integration through analysis of the person drawings. The House-Tree-Person was one of the first uses of human figure drawings as a psychological projective test (Jordan, 1985).

In 1951, Wilfred Hulse further extended and modified the above techniques by introducing the Family Drawing Test (FDT). Hulse (1951, 1952) postulated that
having the child draw his family instead of just a person provided useful information about how the child perceived his family, how he felt about his parents and siblings, his ideas about himself and his position in the family. He did his original work with emotionally disturbed children and then later used drawings of normal children. Hulse's focus was on the broader aspects of the drawings, the "Gestalt" of the family drawings rather than on single characteristics. The size, distance, and distribution of the figures in these drawings had to be considered before any interpretation could be made. He maintained that intrafamilial conflicts are shown in family drawings.

Some of the earliest research on the family drawings was done by Reznikoff and Reznikoff (1956), Lawton and Schrest (1962), and Shearn and Russell (1969). Oliverio (1973) of the University of Rome, Italy, used the FDT to study the effects of different sociocultural environments on the child's feelings and evaluations of the other family members. The study indicated that the children's evaluation of the role of the parents depended strictly on the type of culture and on the structure of the family. Family drawings were also discussed by DiLeo (1970, 1973), and Koppitz (1968) reporting findings on family drawing interpretation characteristics, which include the relative size and placement of figures, the sequence in which the figures were drawn, erasures,
omissions, and distortions of body features and figures. DiLeo (1977) cautioned that drawings should be used as only part of the diagnostic process.

Development of the KFD

Burns and Kaufman (1970) in their work with emotionally disturbed children modified Hulse's Family Drawing Test (FDT) and added the factor of action to the family drawing technique. They stated that the FDT often results in relatively static, rigid drawings with family members lined up facing the viewer as in a family portrait. The authors suggested the use of kinetic instructions requiring the child to draw a picture of his family, including self, doing something, thus introducing movement into the drawings. The child was also asked to draw whole people, not cartoons or stick people, and "make everyone DOING something--some kind of action" (1972, p. 5). It was hypothesized that the addition of movement to the kinetic drawings would mobilize the child's feelings not only as related to the self but also as they related to the family members and the intrafamily relationships. Burns and Kaufman (1970) called this the Kinetic Family Drawing (KFD).

In 1972 Burns and Kaufman published an interpretative manual for the Kinetic Family Drawing. Working from a partially Freudian framework, they reviewed and analyzed 10,000 drawings from individual
patients over the course of 12 years, and published their interpretative system focusing on characteristics of individual figures, actions, styles, and symbols. They used a basic case-study approach in developing the KFD initial scoring system. The Manual for the KFD is composed of 137 drawings done by clients, and the reader must make subjective interpretation of the family drawings.

KFD characteristics, according to Burns and Kaufman (1972), are static qualities found in the drawings. Some examples are erasures, which reflect some type of conflicts; arm extension, reflecting the need to control; and elevated figures, reflecting the need to strive for dominance. Others, such as figures on the back of the page, precarious hanging of one figure, omission of body parts, omission of entire figures, rotated figure, and Picasso eye—an elongated single eye drawn on a front-facing figure were also discussed. The early work of Machover (1949, 1953) was drawn upon in Burns and Kaufman's discussion of characteristics.

KFD actions refer to the movement of energy between people and objects and reflect the interpersonal relationships within the family. There may be a high intensity of energy, as in competition, or low level of energy, as represented by two people sitting facing in opposite directions. The energy may be depicted graphically and symbolically in objects such as balls.
which denote competition, light which signifies aspects of warmth, electricity which suggests control, and Xs which point to areas of conflict.

Styles are drawing approaches which are identified as compartmentalization, encapsulation, lining at the bottom, underlining individual figures, edging, lining on the top, and folding compartmentalization. They are seen as indicating feelings of anxiety, isolation, conflicts, defensiveness, and instability. Styles are most often associated with a child's inability to effectively interact with significant family members.

Symbols represent another category or type of drawing elements which Burns and Kaufman recommended examining in the KFD. Symbols include brooms, bikes, beds, water, and others which are considered to be indications of unconscious material of the subject. These symbols are interpreted from a psychoanalytic perspective. The interpretation of symbols must be done within the context of the child's family situation, developmental level, and cultural background (Annunziata, 1983) and considering "the totality of the individual" (Burns & Kaufman, 1972, p. 144).

Burns (1982) in the third book dealing with the Kinetic Family Drawings emphasized the research and application of the test along with new dimensions of KFD interpretation. While raising several issues regarding reliability, validity developmental norms, and various
scoring systems, Burns did not really address the issues directly. His book identified 80 variables in the KFD including actions; figure characteristics; position, distance, and barriers; styles; and the general impression of the drawing termed Like-To-Live-In-Family. While he suggested an objective scoring system for the interpretation of some of these variables, Burns then discussed most of the drawings in his book from a clinical case-study approach with little use of his objective scoring of the drawings.

Professional response to Burns and Kaufman's (1970, 1972) work has been somewhat mixed. Gersten (1978) and Harris (1978) were sharply critical, complaining about a lack of any standardized approach based upon empirical data and little theoretical framework and explanation to guide the interpretative diagnostic task. Myers (1978) and O'Brien and Patton (1974) have bemoaned the absence of normative data in Burns and Kaufman's publications and, additionally, they complain that the authors tried to establish the validity of the instrument using the case presentation method only.

In spite of these criticisms, there has been a very positive response to the introduction of the KFD in some clinical circles. Ames (1972) indicated that she finds the KFD extremely helpful in clinical practice, when utilized as a part of a comprehensive battery.
Sobel and Sobel (1976) observed that the KFD has achieved widespread use among child and adolescent psychologists. The popularity of the KFD can be attributed to its face validity (Cummings, 1980), its quickness and ease of administration (Mostkoff & Lazarus, 1983), and also due to the recognition of the important role of family dynamics in the etiology and treatment of emotional disorders of children (Reynolds, 1978).

Reliability Studies

While Burns and Kaufman (1970, 1972) and Burns (1982) do not offer empirical validation for the KFD, there have been several research studies which provide information about reliability and validity of the KFD. Reliability with the KFD has been related primarily to the effective evaluation of raters, or judges, and the presence of a well-operationalized objective scoring system. Bauknight (1977), in a study of withdrawn and normal children ages 8 and 9, on the basis of four categories reported a high inter-rater reliability among the three raters who identified children from their drawings who were categorized as withdrawn.

McPhee and Wegner (1976) reported the reliability of the KFD on the interpretation of the KFD's styles of emotionally disturbed children and well-trained judges to score these styles. Assessing the KFD styles of compartmentalization, lining at the bottom and top,
underlining individual figures, edging, and folded compartmentalization, five judges achieved inter-rater reliabilities ranging from .665 to 1.00 with a median reliability of .87. There was also high inter-rater reliability for Myers's (1978) study.

Cummings (1980) reviewed the scoring methods used by McPhee and Wegner (1976), O'Brien and Patton (1974), and Myers (1978) and found that all three methods produced high inter-rater reliabilities when they were examined by two male and two female well-trained examiners using these three objective scoring methods to observe differences among the drawings of behavior-disordered, learning-disabled, and regular-class children. Test-retest reliability, however, was unstable. This lack of stability may suggest that the KFD is most sensitive to children's transitory personality states (Knoff & Prout, 1985), or may be a characteristic of some projective measures (Gardano, 1988).

Mostkoff and Lazarus (1983), using their own objective KFD scoring system, also studied the inter-rater and test-retest reliability of 20 variables. Drawings were obtained from 50 elementary school children 2 weeks apart. The inter-rater reliabilities ranged from 86 to 100%, with a mean of 97% over two raters. Of the 20 scoring variables, 9 demonstrated significant test-retest stability: self in picture, omission of body parts...
of other figures, arm extensions, rotated figures, elevated figures, evasions, omissions of body parts of self, barriers, and drawings on back of page. They also noted that KFDs appear to measure states, as opposed to trait characteristics. Differences in drawings may be due to a child's mood changes, rather than the instrument itself since inter-rater reliabilities tend to be high.

Layton (1984) also demonstrated high interscorer reliabilities for the KFD variables investigated. She obtained 119 drawings from well-adjusted children and 99 drawings from children with problems. She asked two examiners to rate the drawings using a list of 142 signs which she believed indicated family or emotional problems along with 14 items which indicated healthy family functioning. The results of this study showed high inter-rater reliability for 133 of the 157 signs at the .05 level of significance.

Validity Studies

Since the introduction of the Kinetic Family Drawing technique, several studies have explored and reported differing degrees of success in their attempt to show the validity of the KFD. Using a matched group design, Sayed and Leaverton (1974) reported differences in the KFD of 50 children with diabetes and a control matched for age, sex, and race. The ages of both groups of subjects ranged from 6 to 14 years. When compared to
the matched control group, children with diabetes had significantly more examples of isolation and compartmentalization of family members. In addition, they found a correlation between isolation and aggression in the diabetic children's drawings but no such correlation in the control group.

Raskin and Pitcher-Baker (1977) reported significant differences between the Kinetic Family Drawings from 50 kindergarten and first-grade children with perceptual-motor delays and a control group randomly selected of 50 children without such delays. The combined sample included 48 males and 52 females, matched for age and sex. All were given the Martin Screening Test for Motor Disabilities (MST) and the Developmental Test of Visual-Motor Integration (VMI). The KFDs were scored by two raters for indicators of isolation-rejection, body concerns, and sibling rivalry. The results suggest that isolation-rejection and body concerns differentiated the children who show delayed development from those who do not. Rivalry was not a significant discriminator.

McPhee and Wegner (1976) developed an objective scoring guide and investigated KFD styles. They compared the KFD drawings of 102 emotionally disturbed children with 162 drawings by normal children attending public elementary schools. The children ranged in age from 6 to 11 years old. Five judges evaluated each child's KFD and
analysis of variance assessed adjustment status (emotionally disturbed vs. normal) and sex. The results confirmed the general existence of KFD style; however, style was not predominantly associated with the disturbed sample but rather was present at a statistically significant .05 level in the KFDs of adjusted children. There were no significant differences found between boys and girls. This study did not support Burns and Kaufman's predictions that the emotionally disturbed would have had the most style indicators. The McPhee and Wegner (1976) study has been criticized because their comparisons of normal and emotionally disturbed samples did not control for effects of age, intelligence, and other potential covariates.

In a study similar to McPhee and Wegner, Myers (1978) compared a matched sample of 116 adjusted boys, ages 6-8 and 12-14, who were assessed as either emotionally well adjusted or emotionally disturbed children. He developed for this study an objective KFD scoring system of 21 measurable KFD styles and characteristics adapted from Burns and Kaufman (1972) and McPhee and Wegner (1976). The 21 variables were factorized into seven extracted component scores. It was found that four of seven sets of extracted component scores significantly differed between the young emotionally disturbed and the young emotionally well-adjusted groups, but the rest of the component scores did
not. The variables that hold promise of discriminating emotional adjustment were: physical proximity, barriers, description of action, body parts, rotations, bottom lining, top lining, encapsulation, edged placement, evasions, and number of members. Myers supported the Burns and Kaufman (1972) hypothesis that emotionally disturbed children were more likely to include style indicators in their drawings.

Wright and McIntyre (1982) developed a standardized scale for scoring Kinetic Family Drawings of depressed patients who were hospitalized and diagnosed with a major depressive disorder. The study included 41 depressive subjects in the experimental group, and 30 normal in the control group. The groups were matched on level of education and family size but not in sociodemographic variables. The Family Drawing Depression Scale (FDDS) developed by the authors was used to score the KFDs of depressives made before and after hospital treatment. Family drawings were analyzed pre- and post-treatment by three different raters who did not know each other's ratings. Results showed that family drawings of depressed patients were markedly different from those of normal controls. It was concluded that it is possible to standardize a useful and reliable scoring of KFDs of depressive patients.

Sobel and Sobel (1976) administered the KFD to 20 male delinquent adolescents and compared these drawings
with the drawings of 20 normal male adolescents. The age of the subjects was between 14 and 17 years. They found that only 3 out of the 16 scoring variables were found to separate the two samples at a significant statistical level. The drawings of the delinquent adolescents exhibited significantly more body omissions, tended to omit most of their family members in the drawings, and their drawings were characterized by akinesis—lack of action. Sobel and Sobel felt that they could not draw any conclusions about the discriminatory potential of the KFD because their sample size was so small.

Stawar and Stawar (1987) compared two groups of Caucasians: boys who were referred to a mental health center for a variety of complaints and normal boys. She found differences in the drawings of the two groups. Hackbarth (1988) found the KFD was a reliable and valid tool to detect differences between the sexually abused children and those who had not been identified as such. She compared KFDs of sexually abused children, children not identified as sexually abused, and the mothers of these two groups of children. Conant (1988) found also the KFD to be useful in differentiating clinic and non-clinic populations, boys and girls, and young and older children.

McGregor (1978) used the "known groups" method of construct validation in his validity study of the Kinetic Family Drawing technique in working with children with
mental health problems. His study consisted of three
treatment groups and one normal group, a total of 157
children. According to this study the KFD was not a
valid instrument for screening or differential assessment
of children with mental health problems. Groups were not
matched with regard to intelligence, socioeconomic
status, and other factors.

Several studies have explored the validity of the
KFD by focusing on the relationship between the KFD and
other tests. Sims (1974) compared the KFDs of 100
emotionally disturbed children of both sexes, 5 to 15
years of age, with the Family Relations Indicator
(Howells & Lickorish, 1967, 1969), which is a
standardized picture projection test designed to
investigate the relationships between members in a
family. Each figure on the KFD was scored as positive,
negative, or neutral. KFD drawings were compared with
responses obtained from the FRI. It was found that
drawings and responses were significantly related for the
father and mother figures, but not for the siblings. The
results suggest that the KFD is a valid technique to
investigate disturbed parental relations.

Younger (1982) studied the use of the KFD in
psychopathology with males between the ages of 10 and 14
years. Sixty males who were in treatment because of
acting out shy-anxious behavior, and 30 nonclinic males
were given the KFD, Family Environment Scale (FES), and
Family Member Test (FMT). Predicting withdrawal, shyness, and anxiety with the KFD was not substantiated by this study. Younger suggested that the lack of relationship might be due to the unproven FMT, or because the two tests measure different levels of needs and affects. The Family Environment Scale did not correlate with any KFD variables.

O'Brien and Patton (1974) developed an objective scoring method based upon such drawing items as interfigure distance, figure size, the presence of barriers between figures, the activity level, and orientation of each major figure. The subjects were 104 children from middle class neighborhoods in grades 4 through 8. In addition to the Kinetic Family Drawings, a questionnaire composed of the Coopersmith (1967) Self-Esteem Inventory and the Children's Manifest Anxiety Scale (Casteneda, McCandless, & Palermo, 1956) was administered to each child. Teachers also completed the School Behavior Checklist (Miller, 1972) on each child. The authors found the KFD to validly reflect differing levels of self-esteem and anxiety as measured through objective tests.

Cross-Cultural Studies with the KFD

Mangum (1975) tested Black, Chicano, and White educable mentally retarded children 10 to 12 years of age with the Kinetic Family Drawing. The data showed that
White males identified most with father, then mother, then brother; White females identified most and equally with mother and sister, then father; Black males identified most with father, then brother, and then mother; Black females identified most with mother, then father, and then with brother, and sister equally; Chicano males identified most with brother, then father, and then mother, whereas Chicano females identified most with father, then mother, and then sister.

Deren (1975) studied Black, Puerto Rican, and White families referred to a psychiatric clinic. The population from which the clinic obtained patients was primarily of a low SES. A total of 91 families was used in this study. The ethnic distribution of SES was 30% Black, 30% Puerto Rican, 30% White, and 10% other. There were 58 children under 18 years of age and 181 adults. Children from a matriarchal family structure (Black children) drew taller mother figures, relative to father figures, compared with those who promote traditional patriarchal family structure (Caucasian and Puerto Rican), who drew the father significantly larger than the mother.

De Joode (1976) studied the value of the KFD as a measure of family relationships in Brazil. The KFD, the Duss (1950) Fable Test, and a questionnaire about familial relationships were administered to 60 Brazilian children, ages 11 to 12. The mother was depicted as the
most important figure in the family by half of the subjects (55%). The father was depicted as the most important figure by 27% of the subjects; the siblings by 18%; and the self, by 3%. He concluded that the KFD was an effective instrument for describing family dynamics.

Ledesma (1979) tested well-adjusted Filipino adolescents 12 to 15 years of age and found that the KFD reflected the sociocultural differences between the upper and lower income groups under study. Cabacungan's (1985) study explored 9- to 12-year-old Japanese and Filipino children's representation of their family in the KFD and found that culture significantly affected the frequency of drawing, the actual family size, actions depicted, communication and nurturance levels, and styles used.

Nuttall et al. (1988) compared children from China and children from the USA and found that the drawings reflected the respective culture and social values of the two groups. Chinese children reflected the importance of both the nuclear and the extended family in their drawings, while USA children's drawings reflected a greater sense of individualism and independence from their families. Thus, cultural and socioeconomic differences regarding family dynamics and functioning have a significant effect on children's drawings.

Other studies have also suggested the usefulness and applicability of the KFD to other cultures and populations. Shaw (1989) found the KFD a valid and
useful instrument for gaining information about how Black children in the United States perceive themselves and their family relationship. Chartouni (1992) compared the KFDs of American Lebanese with American Caucasian children. She noted that American Lebanese children drew their families doing things together more often than the American Caucasian children. The findings in this study indicate that even though American Lebanese children are open to Western ideas and style of living prior to immigration, they still acquire and retain some of their traditional family relationships and cultural values. Cho (1987) also did a validity study of the KFD among Chinese children in Taiwan and demonstrated the usefulness of the KFD for the Chinese population.

Studies Relevant to This Research Study

The following review of studies is limited to family drawing characteristics that are most relevant to this research study. It includes information from Burns and Kaufman (1972) and Burns (1982, 1987, 1990) as well as other studies that examined variables under study in this research project. The summary is grouped according to four concepts of structural family theory: (1) hierarchies, (2) subsystems, (3) boundaries, and (4) adaptability.

1. Family hierarchy, or the distribution of authority within the structural family system, may be
identified through relative size (height) and the vertical displacement of figures. In general, the heights of figures compared to other figures on the drawing may indicate the subject's perception of importance relative to family members; the larger the size or height of figures, the greater the importance or influence of the figure within family structure (Klepsch & Logie, 1982; Reynolds, 1978). Burns and Kaufman (1972) and Schwartz (1981) considered also feelings of power or dominance within the family to be associated with the vertical displacement or elevation of significant others in the family drawings. Levinger and Gunner (1967) suggested that vertical displacement of a figure placement correlates with dominance and submission or high vs. low status in a relationship.

According to Bing (1970) the relative size of the figures in the conjoint family drawing reflects the importance and status achieved by each person within the hierarchy of the family structure. Deren (1975), in her empirical evaluation of the validity of the Draw-A-Family Test with a total of 91 low SES families from different ethnic groups, found also that perceptions and feelings of power are associated with greater figure size. The relative size variable appeared to be a useful measure for identification of "power figures" relative to authority or power within the family structure.

Koppitz (1966) and Britain (1970) found that
figure size in drawings mirrors sense of self. Small self drawings relative to other figures in the drawings have also been associated with poor self-concept, feelings of insignificance (Klepsch & Logie, 1982), and feelings of inadequacy (Burns, 1982; Burns & Kaufman, 1972; Reynolds, 1978). According to Schwartz (1981), the average size of KFD figures drawn by members of less differentiated families should be smaller than the average relative size drawn by more differentiated families.

Studies with KFDs suggest that position of authority within the structural family system may be identified through height of figures. Gardano (1988) compared children from families in which the father was an alcoholic with a matched normal sample. The results indicated that size of figures is a valid measure in differentiating matched groups. Schwartz (1981) showed that the size of parental figures is an important factor to compare against the size of self figures in Kinetic Family Drawings in order to study positions of power within the family system. She also stated that the average size of KFD figures drawn by members of less differentiated families should be smaller than the average relative size drawn by more differentiated families.

O'Brien and Patton (1974), using a figure size measurement criterion in their study, found that the child consistently drew the father figure largest, the
mother figure somewhat smaller, and the self-figure smaller still. Some studies (McGregor, 1978; Myers, 1978), however, suggested that the size of the family figures was not a significant factor. Nonetheless, more studies are needed to determine whether or not figure relative size is a factor that should be taken into consideration in Kinetic Family Drawing evaluation.

Furthermore, in order to accurately interpret the KFD, it is necessary to understand the age and sex-related changes which are reflected in the drawings. For example, Brewer (1980) found that latency-age children frequently drew parents taller than themselves. Thompson (1975) found that size of figures depicted by normal adolescents varied according to the subjects' age levels and gender. Females ages 13 and 14 drew themselves as the tallest figure, while at ages 17 and 18, the father figure was the tallest one. On the other hand, males at ages 17 and 18 drew the mother as the tallest figure. Thus, gender and developmental level may have an effect on the size or height of drawing figures according to the relative value placed on parental influence or condition (Gardano, 1988).

The cultural and socioeconomic level have also been studied as factors in the evaluation of the family figure sizes. Deren (1975) found that ethnicity is related to one's experience of male or female dominance within the family. Children from a matriarchal family
structure (Black children) drew taller mother figures, relative to the father figure, than those who promote traditional patriarchal family structure (Caucasian and Puerto Rican). Ledesma (1979), in her KFD study done in the Philippines with adolescents of various socioeconomic levels, found that adolescents from the upper classes drew larger parental figures while subjects from lower classes drew major figures as the smaller ones.

2. Family subsystem organization, interaction patterns, and alignments of structural family systems may be identified through the following variables included in this review: distance regulation, central displacement, type of barriers, compartmentalization, and encapsulation. It is important to identify the family subsystem organization of the family figures on the drawings in determining family interaction patterns and which family members are allied with which others and which ones are isolated from each other. Family figure drawings may give a clue to the quality of interaction between family members (Gardano, 1988).

In his social schema research, Kuethe (1962, 1964) found that linear distance between the figures correlated with emotional distance between individuals. Horowitz, Duff, and Stratton (1964) found also that personal distance is represented by linear distance on a drawing task. Bing (1970) found that interpersonal distance between family members may be reflected by the
degree of distance they put between themselves and other members of the family in the drawings. In this study, mothers were much more frequently part of the "scene" than fathers. Fathers were isolated. Kuethe (1962) and Weinstein (1967) also noted that children and adults consistently placed mother-child figure pairs closer together than father-child figure pairs. O'Brien and Patton (1974) found that self figures were drawn closer to the mother figure and the father figure in their Kinetic Family Drawings.

Schwartz (1981), in her study exploring the KFD as a family diagnostic measure, used the figure distance regulation in her scoring system to evaluate family system alignments such as triangulation, parent-child coalition, or detouring. Because triangulation is characterized by unresolved conflict between the parents, and by the involvement of a child in the conflict, the drawing could reflect the emotional distance (Horowitz et al., 1964) or hostility (Britain, 1970) in a triangled situation family schematization. In this case one could expect parents' figures to be drawn significantly farther apart than other families without difficulties, and the triangulated child might be drawn between the parents. She also considered that parent-child coalition, characterized by conflict between the parents, excessive closeness between one parent and a child, and excessive distance between the child and the other parent, could be
evaluated through family drawings. Accordingly, one would expect to find one parent more distant from other family members more frequently in psychosomatic or clinical family drawings than in normal families.

Gardano (1988) also used the distance regulation in her scoring method for the KFD to evaluate the disengaged-enmeshed dimension of family boundaries. Results of the ANOVA and t-tests showed that the distance between the father figure and the children was non-significant. However, the distance between the mother and the father figures appeared to be the strongest contributor in differentiating the groups. In addition, the distances between all figures were significant for group differences. There was also a highly significant difference in the distance between the mother and the father in the alcoholic group, compared with the control group, suggesting a trend for the alcoholic group to be depicted as disengaged.

McGregor (1978), using children of ages 5-1/2 up to 13-1/2, reported significant findings in terms of distance between family figures and children's developmental influences. The study reported that older children (ages not included) showed more distance between family figures than younger children. Brewer (1980) examined the patterns of interaction of figures of 422 normal children in ages 7 to 11 and also showed that younger children (6 to 8) depicted themselves in the
drawings as more actively interacting than the older ones (9 to 12). Thompson's (1975) normative study with adolescents between the ages of 13 and 18 found that most of the KFD drawings were characterized by figures depicted in isolation activity, except for the figures of older sisters. These results might represent the adolescent's own sense of individuation and need for separation from the family.

Other studies examined the central displacement of family drawings on the page and its association with family functioning. Reznikoff and Reznikoff (1956) have associated degree of figures' horizontal displacement from the center of a family drawing with feelings of less centrality of importance in the family. Thus, centralized placement is associated with feelings of self-esteem and importance in the family constellation (Schwartz, 1981). Therefore, in families where a detoured parental conflict causes an overfocus on a child, it is expected that parents will draw the child figure closer to the center than in families where that conflict does not exist (Schwartz, 1981). Bing (1970) indicated that children referred for psychological evaluation were drawn in family drawings in the central place, perhaps illustrating the family feelings that the patient's role was focal to the family functioning.

According to Burns and Kaufman (1972) and Burns (1982), variables of barriers, compartmentalization, and
encapsulation could represent communication blocks and conflicts among family members. Reynolds (1978) associated barriers with rivalry, isolation, and defensiveness between family members. Weinstein (1965) found that emotionally disturbed boys placed greater distance between mother and child figures than did normal youngsters and placed barriers between figures significantly more often. Myers (1978) reported in his study that barriers were drawn less often by younger vs. older boys.

Compartmentalization has been associated with children's attempts to isolate themselves from other family members, feelings of rejection, fear of significant family members, denial, difficulty to communicate openly, avoidance and withdrawal (Burns & Kaufman, 1970, 1972; Kwiatkowska, 1967, 1978; Reynolds, 1978; Stawar & Stawar, 1987). Meyers (1978) stated that younger boys tend to compartmentalize less than older boys. Thompson (1975) indicated that compartmentalization and encapsulation were often used by middle-class adolescents. According to Reynolds (1978), encapsulation reflects the need for isolation or removing threatening individuals.

3. Family boundaries and differentiation within the structural family system may be evaluated through the following variables included in this review: regular distance, differentiation figure characteristics, figure orientation, nurturing level, and cooperation level.
Family distance regulation has been used to assess subsystem boundaries differentiation within the structural family system (Gardano, 1988; Schwartz, 1981; Wood, 1981). According to Schwartz (1981), the overinvolvement characterizing enmeshed or poorly differentiated families should be reflected in family members being drawn close together. Conversely, disengagement would be reflected in family members being drawn further apart.

On an individual level, interpersonal differentiation within the structural family system has also been evaluated through family drawings (Schwartz, 1981). According to Minuchin (1974) and Minuchin et al. (1978), in enmeshed families the individual gets lost in the system. The lack of subsystem differentiation handicaps individual autonomy, sense of independence, children's cognitive-affective skills development, personal identity, and mastery of problems. In addition, individuals from enmeshed systems reflect poorly differentiated perceptions about themselves and each other. In Bowen's (1978) terms, these people have a low level of differentiation of self, with little capacity for autonomous functioning, and they find it difficult to separate themselves from others.

Schwartz (1981) included in her scoring system a criterion to score Kinetic Family Drawings for individual differences within the family system. According to her,
individual features or characteristics such as differing hairstyles, differing facial parts or expressions, differing clothing or clothing styles, different positions or activities, generational boundaries, and gender differences are reflected in family drawings and show the extent to which individual figures are different. The author also indicated that in undifferentiated families the KFD figures should have fewer features which distinguish them from each other than do figures drawn by more differentiated family members.

The structural concept of family boundary has also been related to the family cohesion dimension of Olson's Circumplex Model (Olson, Sprenkle, & Russell, 1979). Family cohesion assesses the degree to which family members are separated from or connected to their family. Family cohesion is defined as the emotional bonding that family members have toward one another (Friedman, Utada, & Morrissey, 1987). Theoretically, Minuchin's (1974) concept of enmeshment/disengagement refers to boundaries differentiation between individuals and subsystems and resonance (sensitivity) of family members to one another. However, since the Structural Family Interaction Scale-Revised (SFIS) dimension of enmeshment/disengagement correlates highly with the Cohesion scales of Olson's model (Peresa & Perosa, 1990b), it does appear reasonable to include family
cohesion scales as another evaluation concept of family boundary dimension.

4. Family adaptability is evaluated with the following drawing variables included in this review: family distance regulation, sexual characteristics, and activity level. The distance regulation variable measures family drawings schematization of flexibility and rigidity during the adolescent developmental stage as perceived by the parents and adolescents involved in this study. According to Minuchin's (1974) model, a flexible family makes adaptation shifts to accommodate adolescents' needs for autonomy, while a more rigid family adheres to patterns associated with an earlier study of children's development level. Schwartz (1981) stated that the schematization drawings by more flexible families should reflect this change in greater linear distance between the adolescent and both parent figures.

According to Schwartz (1981), family flexibility in response to adolescents' new developmental tasks can also be evaluated through sexual characteristics of Kinetic Family Drawing figures. The sexual differentiation score of her scale measures the number of sexual characteristics among the father, mother, and child figures. Drawings by more flexible families should reflect their family structure adaptability showing greater sexual differentiation characteristics. In more rigid families, figures should have fewer sexual
characteristics and should be drawn closer together.

Schwartz's (1981) hypothesis that the sexual differentiation score for drawings by members of psychosomatic families would be significantly smaller than for drawings by their normal counterparts was confirmed for drawings by fathers from the psychosomatic group, who obtained a significantly lower score on the SEXCAR variable than did fathers from the control group. Overall family scores, influenced primarily by the father scores, showed a trend in the predicted direction. The hypothesis was rejected for drawings by mothers and children. Thus, the discomfort around adolescent sexuality present in psychosomatic families, resulting in less sexual differentiation, was partially confirmed in this study.

Sexual characteristics, symbols, and themes in the KFD have been investigated in various studies. German (1986) found sexual symbols present in 50% of KFDs of female adolescent incest victims. This KFD study also showed parents not interacting with each other, separate individual activities, barriers between figures, mother-daughter problems, isolation of the self, anxiety factors, similar treatment of figures, and other factors. The author raised questions of closeness, enmeshment, and identification based on the drawings of figures which were treated similarly. Monttinen (1988) found sexual symbols present in 20% of the KFDs of her Caucasian
sample from religiously affiliated schools, and Shaw (1989) found 14% of the non-clinic Black children including sexual symbols in the KFD. Rodgers (1992) found that children of different ages and sexes included different sexual characteristics in their drawings.

The Kinetic Family Drawing technique emphasizes action between figures. Some studies have reported actions of figures as one reliable scoring measure, indicating that the activity of the mother figure (Cummings, 1980; Ledesma, 1979; Thompson, 1975) and of the father figure (McGregor, 1978; O'Brien & Patton, 1974; Thompson, 1975) are reliable indicators of various levels of the emotional adjustment of children. Myers (1978) also found that activities of the figures differentiated emotionally adjusted and disturbed children. Jordan (1985), using the contrasted method, compared KFDs of girls 11-16 from sexually abusing families with those from normal families. She was able to differentiate the drawings of sexually abused females, in comparison to the control group, in terms of the low level of activity of parental figures.

The depiction of levels of activity varied with age, gender, and socioeconomic status of the subject, particularly in the drawing of adolescents. Brewer (1980) found that age was a significant factor as to whether children drew themselves as interacting or non-interacting with others. Younger children 6 to 8 years
of age drew themselves as interacting, while children 9 to 12 years of age drew themselves as not interacting.

Thompson's (1975) normative study of middle-class suburban normal adolescents found about two-thirds of both male and female subjects depicted themselves and their family members in isolated situations. She also found that figures of children and adolescents were drawn in play actions while parents were drawn in work actions. Male subjects depicted themselves in work actions almost twice as often as did females. Ledesma (1979) found that subjects from upper classes drew major figures in a low level activity. This study showed that SES significantly influences the type of actions depicted.

Hispanic American Families

Historical Background

Hispanics in the United States are not necessarily newcomers. As early as 1513 there were Spaniards who explored and settled in what is now the continental United States (Marin & Marin, 1991). They were here as the first Europeans, before the English, French, or Dutch (Weyr, 1988). Their experience as explorers and settlers was established within the next few decades in what is now Florida, Texas, California, New Mexico, and Colorado, among other places. Spaniards not only explored and played a major role in the founding of such cities as St. Augustine, Santa Fe, San Antonio,
El Paso, Los Angeles, San Francisco, Tucson, and San Diego, but brought alongside the basic elements or foundations of Western civilization (Acosta-Belen, 1988; Sandoval & De La Roza, 1986).

Hispanic is a generic term that refers to all peoples of Spanish origin who reside in the United States or descend from other Spanish-speaking countries (Padilla, 1979; 1995; Soriano, 1995). In some countries, the preferred label has been latino, a Spanish word indicating Latin American origin. Another term that has enjoyed widespread use is La Raza, which refers to the multicultural background of Hispanics who, to some degree, share a social and cultural legacy of Spain, native Indians, and African people (Bernal, Bernal, Martinez, Olmedo, & Santisteban, 1983). In this study the term Hispanic includes all peoples of Spanish origin and descent (Padilla, 1979, 1995; Padilla & Salgado de Snyder, 1985; Soriano, 1995).

Unfortunately, the historical reality of contributions by the Hispanic people in the economic, social, legal dimensions, and other important areas of life to the early American experience have not been properly recognized and much less reported (Sandoval & De La Rosa, 1986). From the earliest days, Hispanics have suffered from a negative stereotype image in American literature, social sciences, and media (Moore & Pachon, 1985). In recent years this image has increasingly
changed as the Hispanic subcultural population grows and becomes more and more involved in all spectrums of U.S. life and mobilizes their own resources and skills to more effectively compete in this pluralist society (Cafferty & McCready, 1985).

General Demographic Characteristics

The Hispanic population in the USA is presently increasing in a disproportionate manner when compared to other ethnic groups. This is caused by the high birth rate, as well as by increased immigration patterns of both legal and illegal Hispanics (Sandoval & De La Rosa, 1986). The number of Hispanics is projected to reach 29 million by the year 2000 -- 10% of the total population of the United States. By 2050, they will be the largest ethnic minority group (Soriano, 1995). In addition, the Hispanic population is very, very young. The median age in 1988 was 25.9 years compared with 32.2 years for the country as a whole (Marin & Marin, 1991).

According to Garcia (1993) the total Hispanic-origin population in 1992 was nearly 64% Mexican, 11% Puerto Rican, 4.7% Cuban, and 14% from various Spanish-speaking Central and South American nations. The remaining 6.4% are categorized as other Hispanic. These dominant subgroups differ in many ways, including palate, customs, socioeconomic conditions, and family characteristics. However, most of these subgroups share in the
experience of speaking the Spanish language, being Catholic, and keeping Spanish customs (Arbona, 1990; Ortiz, 1995; Sandoval & Dela Rosa, 1986; Soriano, 1995).

Regarding geographic distribution, Hispanics are concentrated primarily in the Southwest, Northeast, and Southeast. California and Texas have over 55% of the total Hispanic population and most are of Mexican descent. New York holds about 10% of the Hispanic population, with a large number of Colombians, Dominicans, and Puerto Ricans. Puerto Ricans make up the largest Hispanic population subgroup in New York. Florida is home to much of the U.S. Cuban population and currently holds about 8% of the Hispanic population (Chapa & Valencia, 1993; Ortiz, 1995; Soriano, 1995).

Most of the Hispanics have a low educational level, although this has improved over time. Except for Cubans, Hispanics have lower educational levels than other racial/ethnic groups, including American Indians and African Americans (Soriano, 1995). In 1960, Mexicans and Puerto Ricans had similar levels of high-school completion—less than 20%. By 1980, about 40% had completed high school. By 1990, a smaller proportion of Mexicans (44%) had completed high school than Puerto Ricans (55%). Cubans have a higher educational level than other Hispanics. In comparison with Whites, Hispanic pupils have scored much lower on standardized school achievement tests for as long as test score
results have been recorded by ethnic groups. Again, differences exist between Hispanic subgroups (Carnoy, Daley, & Ojeda, 1993; Ortiz, 1995; Soriano, 1995).

Education and training are directly related to employment opportunities and income levels. Hence, with the lower education of Hispanics, it is not surprising to see that Hispanics also lag behind in employment and income. Hispanics in the U.S. have higher levels of unemployment compared to Whites. About 7.8% of Hispanic males and 7.8% of Hispanic females were unemployed in 1989, compared to 5.5% and 4.9% for non-Hispanics males and females. Among the different subgroups, Puerto Rican males had the highest unemployment rate—12%. In general, Hispanics are more likely to hold jobs that pay less and are more marginal compared to non-Hispanics. This leads to higher financial insecurity, social problems, and, in turn, to higher family stress (Carnoy et al., 1993; Chapa & Valencia, 1993; Ortiz, 1995; Soriano, 1995).

In 1986, 27% of Hispanics were below the poverty level compared to 11% of Whites. Seventeen percent of Hispanic married couples were poor, compared to only 6.1% of White couples. The percentage of Hispanic female-headed households that were poor in 1986 was 55.7% compared to 29.8% of White female-headed households. About 50% of Hispanic children under 18 were poor compared to 36.1% of White children. Among Hispanic
subgroups, Puerto Ricans showed the lowest income compared to the other Hispanic subgroups. The median income for Puerto Rican families in 1988 was $18,932, compared to $21,025 for Chicano (Mexican American) families, while Cuban families at $26,858 had the largest income. These incomes can be compared to the median income of $33,142 for non-Hispanics (Carnoy et al., 1993; Chapa & Valencia, 1993; Ortiz, 1995; Soriano, 1995).

Cultural Traits

The Hispanic heritage is rich and diverse with some basic cultural values, traditions, and characteristics that distinguish it from the dominant society. These preferences and cultural values include, among others, Spanish language, familism, personalism, religiosity, fatalism, and respect.

The majority of Hispanics speak Spanish at home (63%) and a significant proportion speak little or no English (25%) (Marin & Marin, 1991). Using cross-sectional data, Arce (1982) found that parents usually spoke Spanish to their own parents, Spanish and English to their siblings, and more English than Spanish to their own children. However, those children still had competence in Spanish, indicating that they are bilingual, functioning in English and Spanish (Hurtado, 1995). The Spanish-language maintenance may explain the desire to preserve the most important aspect of the
Hispanic culture (Hurtado & Gurin, 1987).

Familism, or family-centered maintenance, is considered to be one of the most important culture-specific values of Hispanics (Hurtado, 1995; Moore, 1970; Soriano, 1995; Vega, 1995). It is usually described as including a strong identification and attachment of individuals with their families (nuclear and extended), and strong feelings of identification, attachment, dependence, value orientation, loyalty, solidarity, and support among members of the same family unit (Hernandez, 1995; Triandis, Marin, Betancourt, Lisansky, & Chang, 1982; Yep, 1985).

Familism is so important that it has been proposed as a possible explanation for the relatively "trouble free adaptation" of immigrants to the U.S. (Cohen, 1979; Rumbaut & Rumbaut, 1976; Szaley, Ruiz, Sthrhol, Lopez, & Turbiville, 1978). In fact, the family appears to help Hispanic people cope with external physical and emotional stressors (Grebler, Moore, & Guzman, 1970) and forms a natural support system which facilitates healthy psychological growth and strength (Mannino & Shore, 1976; Valle & Martinez, 1980).

A number of authors have argued that the family is the single most important institution for Mexican Americans (Alvirez, Bean, & Williams, 1981), Puerto Ricans (Glazer & Moynihan, 1963; Zayas & Palleja, 1988), Cuban Americans (Szapocznik & Kurtines, 1980), and other
Hispanic subgroups (Soriano, 1995). Family members look first to the family to meet both their material and emotional support as well as to facilitate the resolution of conflicts (Avila-Vivas, Morales-Barreto, Russ, & Vazquez-Nuttall, 1983; Christensen, 1977; Marin & Marin, 1991).

Familism also is firmly rooted in ties of obligation to meet psychological and economic needs of their members. The psychological functions include psychological protection of family members, satisfaction of affectual need, socialization of children, and religious upbringing. The economic responsibilities include material maintenance of family members through economic unit, transference of property, and survival of members through provision of basic economic needs (Bernal et al., 1983).

This Hispanic family orientation has also been studied by Sabogal, Marin, Otero-Sabogal, Marin, and Perez-Stable (1987). They investigated the effects of acculturation on attitudinal familism in 452 Hispanics compared to 227 White non-Hispanics. They found that, despite differences in the national origin of Hispanics, Mexicans, Cuban, and other Hispanic subgroups all reported similar attitudes toward the family. Three basic dimensions of familism were found: familial obligations, perceived support from the family, and family as referents. Familial obligations and the
perception of the family as referents appear to diminish with levels of acculturation, but the perception of family support does not change.

Hispanic families also emphasize personalism, as opposed to a depersonalized lifestyle (Canino & Canino, 1980; Soriano, 1995). Personalism is a need to relate in personal terms in a warm emotional fashion, a need to trust people (Sandoval & De la Rosa, 1986). Personalism, which is probably derived from the strong family orientation, also calls for individualized contact and attention in all social, economical, and political relations (Mintz, 1966). For example, in school, Hispanic American children will expect and appreciate individual attention from the teacher and significant others. They will do better if the teacher relates to them on a close interpersonal basis (Vazquez-Nuttall, Avila-Vivos, & Morales-Barreto, 1984).

Religiosity among Hispanics has been seen as a special emphasis of the culture on spiritual values and the willingness to sacrifice material satisfaction for spiritual goals (Ho, 1987). Catholicism is the predominant religion for Hispanic people (Grebler, Moore, & Guzman, 1973). Traditionally, the church exerts important influences upon attitudes and views toward family structure, marriage, and divorce. Women have been historically idealized as pure and self-sacrificing, like the Virgin Mary. Overprotection of girls to save their
virginity is a normal component of the culture. Men, on the other hand, are traditionally supposed to be "macho" (maleness, virility) (Falicov, 1982). The Hispanic people may use the church as an important resource in healing or therapy as well as a support system outside the family in times of crisis (Ho, 1987).

Fatalism is another cultural orientation commonly found among Hispanic families. Fatalism implies a fatalistic view of life and tends to be present-oriented, since it feels powerless to control the future (Garcia-Preto, 1982; Ruiz & Padilla, 1977). The poorer the family, the more likely it is to accept whatever happens as part of its fate (Mintz, 1966). Concurrent with fatalism and complementing it is the prevalent belief in the manifestation of luck as an unpredictable force which interferes in human life. This mysticism presupposes the existence of supernatural forces which willingly interfere in human affairs (Sandoval & De La Rosa, 1986).

Finally, Hispanic American families are expected to have respect for authority, the family, and tradition (Christensen, 1977). Respect is a construct which accentuates the importance of deference or respect for individuals who occupy roles of higher prestige and recognition in society (Yep, 1995). Respect is transmitted to children through early socialization in the home and reinforced by traditional hierarchical patterns in the family (Canino & Canino, 1980). Respect
for parents extends also to other authority figures, such as teachers, older neighbors, and relatives.

**Structural Family Functioning**

From a family system perspective, it is possible to view the Hispanic family as a living social system (Kaufman & Borders, 1988).

A system can be defined as a group of interconnected or interrelated parts which mutually interact across time. Systems have distinctive properties. First, they are characterized by wholeness; they are made up of their parts and the relationship of the parts, and thus the system is greater than the sum of its parts in isolation. Second, systems are characterized by interrelatedness, in that all parts influence each other. Third, systems have boundaries that differentiate one system from another system or subsystems. Fourth, living systems are either open (ideally) or closed. In other words, they are either capable of change or remain rigid and fossilized. And, fifth, when they are flexible, open, and responsive to forces within and without, they can maintain a dynamic equilibrium, or dynamic homeostasis. How family members in these systems cope with conflict and change will be reflected in their interactional styles across time (Jones & Butman, 1991). In this study, the Hispanic family is conceptualized as having its own open
structural system which colors the behavior of individual family members and influences their functioning (Minuchin, 1974; Rueschenberg & Buriel, 1995).

The structural family system framework that guided this study with Hispanic families focuses on the hierarchies, subsystems, boundaries, and adaptation. In the Hispanic family, the hierarchal distribution of authority and responsibilities within the structural family system is clearly defined: the father acts as head and authority of the household; the mother provides nurturance and support and acts as mediator between the children and their father; and older children, especially males, exert authority over younger siblings. The traditional role of the father as the authority who disciplines and controls has been well documented in the literature (Diaz-Guerrero, 1975, 1985; Ho, 1987; Kaufman & Borders, 1988; Lacay, 1981; Padilla & Ruiz, 1974; Rogler & Hollingshead, 1985; Sena-Rivera, 1979).

It is important to point out, however, that the schema of the Hispanic family system distribution and authority has experienced a change because of divorce and single parenthood. In 1980 there were 3.3 million single-parent Hispanics. Also in 1980, 19% of all Hispanic families were maintained by a woman with no husband present, compared to 14% of all families in the United States. Overall, in 1987 Hispanic families were twice as likely as non-Hispanic families to be headed by a female. Because of
the increase in a female-headed household structure, the percentage of Hispanic children under 18 living with one rather than both parents is increasing. In 1980, about 1 in 5 children (21.2%) lived with one parent. By 1987 this increased to 28.9% for Hispanics, whereas the proportion of White children in single-parent families remained much lower and grew at a lower rate (Soriano, 1995). These increases in the Hispanic population of divorce and in the number of female-headed households are likely to mean a change in the family structure system and in the internal family system functioning.

There are three main subsystems in the Hispanic structural family system. They are the marital, parent, and sibling subsystems (Kaufman & Borders, 1988). The marital family subsystem has been defined in terms of male dominance and female submission (Penalosa, 1968). The husband assumes an instrumental role of provider and protector of the family while the wife assumes the traditional role of homemaker and caretaker (Kaufman & Borders, 1988). The husband is not expected to assume household tasks or care for the children. The wife's responsibility is to care for the home, children, and remain under the authority of the husband (Gonzalez, 1982; Ho, 1987; Staples & Mirande, 1980). Extended family members also perform parental duties and functions (Falicov, 1982).

In Spanish, to be a "macho" implies a dominance
of the male over the female in matters pertaining to individual freedom. It also implies a role in society as being a protector, provider, and leader. This term also is synonymous with being a responsible person who takes care of his own with dignity and honor (Morales-Gudmundsson & Rosado, 1995).

Stevens (1973) explains the nature of male-female relationship within the family subsystem in terms of machismo-marianism, concepts rooted in Mediterranean practices and religious belief. Machismo, a Hispanic gender role, alluded to the assumed cultural expectation for men to be dominant in social relationships (Yep, 1995). Marianism or Mariology is described as the "spiritualization of rembrismo" (Morales-Gudmundsson & Rosado, 1995, p. 22).

According to the author, Marianism is based upon a Catholic theological concept related to the Virgin Mary role, which has erected a secular pattern of beliefs and practices related to the position of women in society. Thus, Marianism teaches that women are morally superior to and spiritually stronger than men. These beliefs are manifested in behaviors such as humility, self-sacrifice, abnegation, submissiveness, premarital chastity, and respect for the sacredness of the mother figure. For a woman, earthly approximation to sainthood is contingent upon motherhood, while numerous offspring afford visible proof of virility for men.
Although in most of the Hispanic marriage relationships there is outward compliance with this cultural ideal of male dominance and female submission, this is more a social fiction than an actuality (Falicov, 1982). In reality, Hispanic families may include husbands who are domineering and patriarchal (Fernandez-Marina, Maldonado-Sierra, & Trent, 1958; Penalosa, 1968), who are submissive and dependent on their wives for major decisions, or who follow a more egalitarian power structure (Hawkes & Taylor, 1975; Ybarra, 1982a). According to Garcia-Preto (1982) and Stevens (1973) it is also important to keep in mind that while the Hispanic father acts as spokesman for the entire family, in actuality the mother may be the true power behind the surface family structure.

Factors such as level of acculturation (Tharp, Meadow, Lennhoff, & Satterfield, 1968), wife's employment outside the home (Ybarra, 1982b), or specific social characteristics of family members are related to a more egalitarian-companionate marriage pattern (Baca-Zinn, 1982a). In general, Hispanic Americans appear to be moving away from such strict concepts of authority roles within the family, and with this movement approaching new normative behaviors for males and females (Carrillo, 1982). However, this change in family structure and exposure to the majority culture with different sex-role expectations can produce marital conflicts (Sue & Sue, 1990).
The parent-child subsystem follows the cultural prescription for the behavior of men and women. The Hispanic father disciplines and controls while the mother provides nurturance and support. Consistent with the Hispanic sense of hierarchical orientation, the status of parents is high and that of the children is low (Ho, 1987). Children are expected to be obedient and are usually not consulted on family decisions. They are expected to contribute financially to the family when possible. Sexual topics are rarely discussed with the children (Sue & Sue, 1990). Generally, a daughter is desired, however, after a male has been born (Mejia, 1983).

Parents tend to set a certain amount of distance between themselves and their children. The father, particularly, is likely to be more distant and less communicative, while the care-giving mother tends to be closer and more affectionate with the children (Canino & Canino, 1980). The mother has been depicted as often overprotecting, frequently using physical gestures of touching when speaking to her children. The father, on the one hand, is described as being aloof, frequently absent from child-rearing responsibilities within the home; on the other hand, he is also able to demonstrate deep feelings of joy, sadness, and excitement (Carrillo, 1982). Like the mother-son relationship, the father-daughter dyad also has an affectionate bond—but not as
intense as the mother-son bond—with the father also taking on the role of protector (Staton, 1972). The father's disciplinary role in the family system reduces his direct involvement with the children while it reinforces the mother's centrality in the family (Falicov, 1982).

The sibling subsystem within the Hispanic family is characterized by a large-sized, vertical hierarchical structure, and male sex-role dominance (Ho, 1987). Early in life, siblings are assigned real responsibilities and roles necessary for the functioning of the household (Murillo, 1971). They are expected to get along with each other, with the older taking care of the younger and the brothers protecting the sisters. Typically, parents accord authority to older siblings and delegate some supervisory and caretaking functions to them (Falicov, 1982). It is not unusual for the older siblings to have the responsibility of caring for younger children and assisting with other household duties performed by adults. These roles do not imply a boundary diffusion and the older child should not be labeled as "parent child" (Minuchin, 1974). These complementary roles are part of the Hispanic structural family functioning (Ho, 1987).

Female siblings learn early in life to play the role of mother and homemaker by caring for younger brothers and sisters and by helping with the housework. A girl is afforded less freedom than her brothers. She
is expected to be submissive in relation to the male. As the mother, she is supposed to be affectionate, tender, and overprotective toward children. She is raised to see the father as the ultimate authority who can determine her fate in either permitting or prohibiting her from realizing her plans. When she asks her mother's permission, she is told: "Preguntale a tu papá; lo que diga tu Padre" (Ask your father; whatever he says). She is protected by the males in her family and is expected to be "pure" and held in high esteem by the extended family and the community (Carrillo, 1982).

Boys are discouraged from participating in activities that might be interpreted as submissive and unmanly, such as helping with the dishes. These tasks are traditionally female and should not be male. Boys are to be "little men," to come and go as they please, to play with other boys and to accept responsibility as they grow into their adult roles as authority figures. In traditional Hispanic families, males have a great deal of independence, in contrast to the female, who is protected by the family and is not allowed similar freedom.

The boundaries in the Hispanic structural families system tend to be more enmeshed than White American families (Canino & Canino, 1980; Szapocznik, Kurtines, et al., 1989; Vega, 1995). The typical nuclear family is embedded in an extended family with flexible and open boundaries, which at times appear enmeshed and
overinvolved. These families reveal clear and fluid boundaries which include all family members such as cousins, aunts, uncles, and grandparents. Besides blood relatives, the extended family includes friends, orphans, and single, family-less individuals (Madsen, 1964).

According to Falicov (1982) five characteristics explain family patterns of interaction: (1) interdependence among members of the same and other generations; (2) high level of togetherness and cohesion; (3) well-defined hierarchical organization of long-standing; (4) loyalty among members of the same and other generations; and (5) family-group identity and loyalty are more important than autonomy and independence (nuclear families attempt to preserve identity and boundaries by living in separate households, but near to the extended family of origin).

Ho (1987) cautioned not to assume that the family boundary is diffuse just because the spousal system of the Hispanic family is structured hierarchically instead of egalitarian. Because the spousal system boundary is never that close, it may not be so susceptible to the process of triangulation, a three-person system in the family. The central nurturing role of the Hispanic mother and the disciplinarian role of the father may create an alliance between mother and child that will exclude the father, but such coalition is well accepted within the Hispanic family structure. In addition, the
Hispanic wife's sense of familism, hierarchy, and family loyalty discourages her from subverting her husband's relationships with her or sabotaging her child's relationship with his father.

There is some evidence, however, that triangulation and dysfunctional enmeshment patterns between the family subsystems may develop by diffusion of boundaries during periods of crisis triggered by stresses associated with migration, acculturation, substance abuse problems, socioeconomic conditions, intergenerational family conflicts, and other issues (Canino & Canino, 1980; Florez-Ortiz & Bernal, 1990; Minuchin, 1974; Szapocznick, Scopeta, Kurtines, & Aranalde, 1978).

Finally, the adaptability dimension in the Hispanic family system has received some attention in the literature. In general, it seems that the Hispanic American family is a flexible institution which adapts to changing environmental conditions (Vega, Hough, & Romero, 1983; Vega, 1995).

In another study, Vega et al. (1986) reported data from a community study sample of Anglos and Mexican Americans concerning two dimensions of family functioning: cohesion and adaptability. The Family Adaptability and Cohesion Evaluation Scales (FACES II) were used with a sample of 294 parents with school-age children. They found slight differences between both groups, with Mexican Americans scoring high in
flexibility in dealing with issues of family structure and role content. They concluded that the Hispanic family is likely to have a greater ability to try new ways of dealing with problems or shifting responsibilities from person to person.

Griswold del Castillo (1984) reported that the traditional Mexican American families were flexible, pluralist, and adaptive to survive. Studies of immigration and social network attest also to the structural flexibility of families and their instrumental role. Family networks are used to solve logistic problems associated with immigration, to garner information about employment, and to sustain and offer shelter to immigrants or migrants until they have established an economic foothold (Portes & Back, 1985).

Another study (Schumm et al., 1988) examined satisfaction with a variety of family relationships among intact families, both rural and urban, in 14 states. Generally, both Hispanic parents and their adolescent family members were more satisfied with family life than their non-Hispanic White counterparts.

Hispanic family functioning must be understood not only in terms of structural and intergenerational family processes but also in terms of survival stresses. The sources of stress that are external to the family and that may condition patterns of dysfunction include, among others, discrimination, racism, poverty, forced
immigration, and language barriers (Bernal et al., 1983).

Family Functioning and Acculturation

Different authors have argued about the role of the acculturation process in the Hispanic family functioning. Heller (1966) stated that the Mexican American family hinders acculturation by encouraging overdependence and thereby preventing family members from integrating properly into the society of this country. Zinn (1975) viewed the Mexican American family as serving to protect its members from the negative effects of acculturation, such as prejudice, discrimination, and the imposition of minority status. Ramirez (1983) argued that the unique acculturation experiences of Mexican American families can produce a bicultural adaptation to U.S. society.

Rueschenberg and Buriel (1989) studied the impact of acculturation on family functioning of Mexican Americans using a family system framework. Acculturation was defined by general status, language preference, and length of residence. Results of this study indicated that the basic internal family system remains relatively unchanged during the acculturation process. Thus, patterns of intrafamilial relationships and interactions do not appear to differ substantially from one generation to the next despite the fact that English becomes the primary language and family members become active in U.S.
society. The overall results of this study support a differential relationship between acculturation and family functioning.

Sabogal et al. (1987) also found evidence for differential acculturation in family functioning. They investigated the relationship between acculturation and three dimensions of attitudinal familism and found that perceived family obligations and the family as referent decreased with acculturation while perceived family support did not.

Other studies also found the following areas of family functioning remaining relatively unaffected by acculturation: the ability of social support networks, the amount of the husband's power within a marriage, how decisions get made in marriage, and the desired geographical closeness to their families (Baca-Zinn, 1982b; Cooney, Rogler, Hurrell & Ortiz, 1982; Holtzman & Gilbert, 1987; Keefe & Padilla, 1987).

Although acculturation is apparently not a destabilizing factor for most of Hispanic families, the long-term consequences of acculturation on the Hispanic family structure, family functioning, and lifestyle have not been carefully studied (Massey, Zambrana, & Bell, 1995; Vega, 1995). An expanding body of studies, however, indicates that acculturation is linked to deterioration of family functioning, changes in household structures, high levels of personal disorganization,
adolescent pregnancy, anxiety, depression, drugs, alcohol, and changes in traditional values and gender roles (Amaro, Whitaker, Coffman, & Heeren, 1990; Cortes, 1994; Gil, Vega, & Dimas, 1994; Vega & Amaro, 1994). It has also been reported that acculturation is associated with family maladaptive interactions, intergenerational conflicts, and may produce intercultural conflicts, particularly with Cuban immigrant families (Szapocznik, Kurtines et al., 1980; Szapocznik & Truss, 1978).

Overall, research studies showed that in some areas of family functioning and lifestyle there are cultural changes with cultural conflicts, and in others there are not (Baca-Zinn, 1995; Hurtado, 1995; Solis, 1995; Williams, 1990). These cultural changes take the form of stable biculturalism rather than complete assimilation into the dominant mainstream. The majority of Hispanic Americans are bicultural (Hurtado, 1995; Padilla, 1994; Ramirez, 1983; Rueschenberg & Buriel, 1995; Ruiz, 1981; Saldana, 1995).

Family Therapy Help-Seeking Patterns

The literature shows that Hispanics do not consider mental health services a primary solution to the family and emotional problems (Casas & Keefe, 1980; O'Sullivan & Lasso, 1992). Acosta, Yamamoto, and Evans (1982) gave the following reasons for Hispanics' underutilization of health and mental services: (1)
language barrier, (2) cultural and social class differences between therapist and patients, (3) insufficient number of mental health facilities, (4) overuse or misuse of physicians for psychological problems, (5) reluctance to recognize the urgency for help, and (6) lack of awareness of the existence of mental health clinics.

The family is the primary source of support and help for Hispanic Americans. Before outside help is solicited, godparents may provide help for the couple or the family. They are like an additional set of parents who act as guardians or sponsors of the godchildren (Falicov, 1982). In the Puerto Rican family, the "padrino" (godfather) also is used to mediate intrafamily conflict and as an advocate for the family (Fitzpatrick, 1981). Another of the reasons why Hispanics do not utilize the services is because of the role that the Catholic church plays in helping Hispanic Americans in times of stress and illness. Priests, traditional healers, and religious leaders can be strong family resources for them (Garrison, 1977; Ho, 1987; Ruiz & Langrod, 1976; Sandoval, 1977, 1979).

Furthermore, several other factors explain the underuse of mental health services by Hispanic families such as socioeconomic barriers, cross-language factors, lack of culturally trained psychotherapists, and problems with assessment, diagnosis, and treatment approaches.
(Garrison, 1977; Malgady et al., 1987; Marcos, 1979; Marcos & Alpert, 1976; Marcos, Urcuyo, Kesselman, & Alpert, 1973; Padilla & Salgado de Snyder, 1985; Ruiz, 1982; Sandoval & De La Rosa, 1986).

**Family Context of Adolescent Substance Abusing**

**Background**

The literature on adolescent substance abuse is clear in positing a relationship between family system dynamics and substance abuse. The family with substance-abusing adolescents has been described in the research literature as enmeshed, overprotective, rigid, and inaffectual at conflict resolution, and unable to negotiate the shifts necessary to allow for the adolescent's individuation and identity development. The transition into adulthood, thus, not only requires that the adolescent achieve an appropriate balance between separateness and connectedness in relationship to the family of origin, but also requires that the parent-child relationship be reconstituted on a more mature and adult level (Allison & Sabatelli, 1988; Bartle & Sabatelli, 1989; Cleveland, 1981; Kaufman, 1985b; Klagsbrun & Davis, 1977; Levine, 1985; Seldin, 1972; Stanton, 1979; Volk et al., 1989;).

The literature on substance abuse shows that adolescents use drugs for different reasons. According to Beschner (1985) and Glick and Moore (1990),
adolescents also use and abuse drugs for the following reasons: drugs often are readily available, provide a quick, easy, and frequently cheap way to feel good, offer a means of gaining acceptance in peer relationships, and may help modify unpleasant feelings, reduce tension, and help to cope with life's pressures.

Stanton, Todd, and Associates (1982), stated that substance abuse generally has its origin in adolescence. It is tied to the normal, albeit troublesome, process of growing up, experimenting with new behaviors, becoming self-assertive, developing close relationships with people outside the family, and leaving home. Adolescent substance abuse is also related to family dysfunctional structures and interactional patterns.

Huberty and Malmquist (1978) found that adolescents are particularly vulnerable to drugs if they have preexisting character disorders or live in an inadequate family functioning system.

The framework for understanding adolescent substance abuse in the present study is Structural Family Theory. Therefore, this literature review is mainly focused on structural family concepts and family systems approaches as they relate to substance abuse. Other studies related to this subject, however, are also included in this review in order to facilitate the understanding of the family context of adolescent substance abuse.
Incidence and Trends of Adolescent Substance Abuse

Although numerous surveys of the use of alcohol and other drugs among Hispanic adolescents have been conducted in recent years, an accurate and comprehensive review of Hispanic patterns of substance abuse is limited by lack of data (Zambrana, Dorrington, & Hayes-Bautista, 1995).

According to the National Institute on Drug Abuse (NIDA) 1985 National Household Survey on Drug Abuse, rates of cocaine use are similar for White and Hispanic females, although both Black and Hispanic female adolescents' alcohol and other drug use is generally lower than it is for White females. Surprisingly, lifetime prevalence of inhalants was slightly higher for White females than either Hispanic or Black adolescent females. Early studies found disproportionately high rates of inhalant use among Hispanic adolescents (Perez, Padillo, Ramirez, Ramirez, & Rodriguez, 1980); however, more recent school surveys indicated that this gap may be narrowing (Soriano, 1995).

Kandel and Andrews (1987) found that Hispanics were twice as likely as Whites to have ever used heroin. The results from the 1988 Hispanic Health and Nutrition Examination Survey (HHANES) reported the prevalence of marijuana, cocaine, inhalant, and sedative use among Mexican Americans, Puerto Ricans, and Cuban Americans.
ages 12 to 44 (N = 8,021). Of Mexican Americans aged 12 to 17, 31% reported some lifetime use of marijuana, compared to 26% of similar-age Puerto Rican adolescents. The small sample of Cuban Americans aged 12-24 (21%) reported having used marijuana at some time in their lives.

Results from the HHANES (1988) also suggested that drug use among Hispanics increases with age. However, the extent of use for various substances varies among different Hispanic groups. For example, 4% of Mexican American youth aged 12-17 reported having used cocaine, compared to 18% of youth aged 18-24. Among Puerto Rican youth aged 12-17, 7% reported lifetime use of cocaine. However, the percentage of youth aged 18-24 who reported having ever used cocaine increased to 37%. Among Cubans aged 12-24, 12% reported lifetime use of cocaine.

Illicit drug use was a major cause of death among Hispanic males and also contributed significantly to the high infant mortality and low birthweight experienced by Puerto Ricans. Puerto Ricans were also found to have the highest prevalence of illegal drug use, with the exception of inhalants. The use of drugs is a serious problem among all Hispanic groups (Soriano, 1995).

Studies among Hispanic Americans show there are important differences in the use of alcohol and other drugs between Hispanic males and females (NIDA, 1985).
Males use illicit drugs at higher rates than do females (Booth, Castro, & Anglin, 1990). Mata's (1986) survey of Texas rural youth found a higher frequency of alcohol use among Anglos (63%) than Mexican Americans (56%). While Anglo males reported a higher frequency of alcohol use (63%) than Mexican American males (61%), the difference in use was slight. Among females, the differences were greater: 65% of Anglo females reported alcohol use compared to 51% of Mexican American females. Studies based on Cubans (Miami) showed males having a higher likelihood of abusing drugs than their female counterparts (Page, 1980; Santisteban & Szapocznik, 1982; Szapocznik et al., 1983). Similar observations have been made pertaining to Puerto Rican male adolescents (Colon, 1987; DiBartolomeo, 1980; Robles, Martinez, & Moscoso, 1979; Velez-Santori, 1981).

Only a few authors noted the differences between urban and rural areas with Hispanic American substance-abusing adolescents. Regardless of regional differences, higher rates of substance use and abuse are recorded for urban adolescents (Booth et al., 1990). Other studies, however, suggest that the rates of drug use among rural adolescents in Texas, particularly among Mexican American males, are higher than previously suspected (Mata, 1984, 1985). In rural areas, where many illicit drugs are not available, adolescents may use household solvents as a means of getting high (Booth et al., 1990).
Research findings also seem to add further support to the idea that drug abuse among Hispanic youth may be associated with their loss of identification with their parents' culture of origin (Rodriguez-Andrew, 1985; Szapocznik & Kurtines, 1980), low socioeconomic status, availability, poor school performance, and levels of acculturation-stress (Belitz & Valdez, 1995; Delgado, 1990; Morales, 1984; Schinke, Mancher, Palleja, Zayas, & Schilling, 1988; Zambrana, Dorrington, & Hayes-Bautista, 1995). Poverty conditions and the stresses of life in the inner city may prompt high rates of drug use (Booth et al., 1990). Other studies, however, question the important role that poor economic circumstances play in the use of illegal drugs. Some studies indicate that those Puerto Ricans and Mexican Americans who have higher annual incomes and better financial conditions tend to use illegal drugs more often than those who are not as well off financially (De La Rosa et al., 1990).

Adolescent substance abuse has also been related to low social self-concept (Galan, 1988; Perez et al., 1980), and to an increase in the number of Hispanics with AIDS. As of August 1988, 29.1% of all intravenous drug users who contracted AIDS were of Hispanic heritage (De La Rosa et al., 1990; Morales, 1984).

Some studies have indicated that strong emotional bonds among family members may reduce the risk for adolescents' substance abuse. It has been reported that
family cohesion, communication, flexibility, positive emotions, close relationship between parents and child, positive parental modeling, love and trust by parents and families are characterized by conflict resolution (Brook, Whiteman, Nomura, Gordon, & Cohen, 1988; Coombs & Paulson, 1988; Coombs & Landsverk, 1988; Glynn, & Haenlein, 1988; Kandel, 1980; Stanton, & Todd, 1982).

Adolescent Substance Abuse and Structural Family Functions

Having adopted a Structural Family Approach for this study, it seems essential to organize the following review of the literature along four structural dimensions of family functioning that are targeted: (1) family hierarchy, (2) family subsystems, (3) family boundary, and (4) family adaptation.

Family Hierarchy

Families with substance-abusing adolescents are characterized by a variety of dysfunctional structural problems (Anderson & Henry, 1994; Joanning, Quinn, Arredondo, & Fischer, 1984), including a hierarchical structure that is imbalanced, reversed, or confused (Lewis, Percy, Sprenkle, & Trepper, 1991). West et al. (1987) studied a total of 35 families in order to determine the extent to which maladjustive patterns existed within families of substance abusers. In each family who participated in the study, one offspring was
hospitalized for substance abuse problems. All the patients were White and ranged from 13 to 25 years of age. These families were characterized by maladaptive patterns of interaction, and 17 of 35 families demonstrated a hierarchical reversal, in which the patient was described as more influential than one or both parents.

Madanes, Dukes, and Harbin (1980) conducted a study with 18 Black male heroin addicts of low socioeconomic class who were compared with families of schizophrenics and high achieving normal controls. They used the Proverb Task, the Family Rorschach test, and the Family Hierarchy test as assessment procedures. Fourteen parental persons in the families of addicts were experiencing hierarchical reversal, or hierarchal relationship, in which the offspring were as influential as or more influential than the parents. The study reported high scores of the families of addicts in terms of hierarchical reversals and cross-generational attachments, suggesting that the members of these families are involved in cross-generational alliances.

Cleveland (1981) used the Structural Family Therapy model in her clinical work with families of young people who were experiencing substance-abuse-related problems. Noted were family dysfunction structures with the power and authority of the family being breached by generational boundaries. In contrast, Gardano (1988),
comparing children from families in which the father was an alcoholic with a matched normal sample, did not find significant results for her hypothesis that in the experimental group one parent (in this study the mother) and a child would have parental authority, rather than both the father and the mother.

**Family Subsystems**

Since the 1950s a gradual increase in information about maladaptive family interactions and substance use and abuse has been reported. In 1954, Gerald and Kornetsky studied the families of 32 adolescents admitted to the hospital. They described the mothers as excessively controlling and stern (40%) or excessively indulgent and non-disciplinary. The fathers played a minimal role in the patient's life through absence, disinterest, separation, or divorce. Fort (1954) also studied the symbiotic tie between mothers and substance-abusing sons and noted that such mothers were overprotective, controlling, and indulgent, resembling the mothers of alcoholics and schizophrenics.

In 1961, Wolk and Diskirk reported on 344 parolees from the New York state prisons who had been involved with heroin abuse. The mothers were overprotective, masochistic, and each maintained her child's emotional illness for her own emotional survival, contributing largely to the poor adjustment of the drug
addict. Chein, Gerard, Lee, and Rosenfeld (1964) reported on a comparison of 30 male compulsive drug abusers with 29 normal controls. In 80% of the addicts, as compared with 45% of the controls, there was an extremely weak father-son relationship. In 48% of the addicts, as compared with 17% of controls, the father figure was absent for a significant part of the addict's early childhood. In 97% of the addicts' families, compared with 41% of controls, the parents had a disturbed relationship. The relationship between mothers and addict, compared with the controls, showed little difference.

A brief study by Kurtzberg, Eavior, and Lipton (1966) assessed the responses of 59 incarcerated male heroin addicts and 60 incarcerated male non-addicts to a Draw-A-Person Test. They reported a greater number of male addicts drawing the female figure first and also larger. They interpreted these results as confirming the theories of the male addict's overidentification with, and dependence on, his mother. Welpton (1968) studied 10 chronic LSD users and found disturbed family patterns. The mothers were excessively involved with the patients to compensate for poor relationships between parents. Patients viewed their fathers as rivals who had disappointed their mothers and were not to be imitated. The author found further that the patients had difficulty separating from their home environment. Vaillant (1966)
also reported that 72% of addicts still lived with their mothers at age 22, and 47% continued to live with a female blood relative after age 30.

In 1970, Wellish, Gay, and McEntire looked at the dyadic relationship of 1,000 heroin addict patients. They identified the mothers as overprotective and highly dependent on their sons who were in competition with their daughters for the father. The fathers were portrayed as usually absent from the home or passive-aggressive and emotionally distant.

Attardo (1972) studied 28 mothers of drug addicts, 41 mothers of schizophrenics, and 60 mothers of normal adolescents, who were matched for demographic variables. The author created a symbiosis or "S" scale based on Mahler's concepts of symbiosis and separation-individuation. The results showed all three groups of mothers as having similar levels on the symbiotic scale relating to their offspring during ages 0-5. However, in the age group 6-10, the mothers of drug abusers were significantly higher on the symbiotic scale than the other two groups of mothers. In the 11-16 age group, the mothers of drug abusers were again statistically higher than the other two groups of mothers on the "S" scale, but the mothers of schizophrenics were also significantly higher than the normals in this age level.

Blumm and associates (1972), in a well-planned and systematic study, also attempted to explore the
family factors that lead to drug risk in children and adolescents. They suggested that adolescent drug use is closely linked to fundamental matters in childhood and parental conduct, priorities, discipline, and beliefs. In families that are change-oriented and show tendencies toward excessive liberalism and agnosticism, adolescent drug abuse is more common. Unfortunately, family interaction dynamics cannot be identified in this large study.

Kirschenbaum, Leonoff, and Maliano (1974) studied 10 families with the purpose of determining what clinical observable family interaction patterns characterized families with a drug-using member. The mean age of the subjects was 19.0. They found poor interaction processes, absence in communication patterns, emotional isolation of family members, lack of enjoyment within the family unit, and family coalition. There was a consistent coalition between the father and the mother against the IP. Conflicts and pain between the parents invariably were shifted by the IP unto himself. The spousal relationship was characterized by difficulties in intimacy, and more specifically, by sexual conflicts.

Streit, Halsted, and Pascale (1974) studied the differences among young users and nonusers of drugs of 1,050 elementary school children, considering their perceptions of parental behavior and found that both male and female users perceived significantly more hostility
with autonomy granted by parents than did nonusers. Freedman and Finnegan (1976) observed that many of drug-dependent women treated at the Family Center of Philadelphia General Hospital became stuck in the developmental process of becoming independent young adults because of intergenerational conflicts with their parents. Many of these women demonstrated major difficulties dealing with autonomy and authority.

Noon and Reddig (1976) found that a majority of drug abusers and addicts maintained close ties with their families of origin years after they had apparently left home. Alexander and Dibb (1975, 1977) also observed in their clinical work with two-parent families that opiate addicts maintained close emotional and financial relationships with their parents. They also reported that in addict families the father is as likely as the mother to be close to or overindulgent with the addict. In this study the father was not peripheral, distant, and negative as the literature reported. Stanton (1977) was one of the first observers to quantify the heroin addict's frequent involvement with family. A study of 85 addicts noted that, of addicts with living parents, 82% saw their mothers and 58% saw their fathers at least weekly, and 66 percent either lived with their parents or saw their mothers daily.

Reilly (1976, 1992), based on clinical experiences and studies with drug-abusing clients between
the ages of 12 and 25, suggested that drug abuse in adolescents is associated with family dysfunctional systems and interactions. He describes, among other factors, two basic themes that underlie these drug-abusing family structures.

First is the impaired mourning. The parents of youthful drug abusers have suffered profound emotional losses within their own families of origin such as loss of their own parents via death, divorce, rejection, or neglect, and they have never worked through this conflict of the lost love object. In order to guard against loss and the recognition of loss, the parent may reincarnate his or her ambivalently loved and lost object as the current family member. Often this person is the drug-abusing adolescent who has been selected to reincarnate or stand in for his or her parent's lost object. The family role of the drug-abusing child is to function as the black sheep or scapegoat whose bad behavior both provokes and justifies the parents' ambivalent attachment to him or her and their hostile overinvolvement.

The second theme that underlies these families is family collusion. Drug-abusing behavior within a family system operates as a homeostatic regulatory device. It serves as a means of saving the marriage, distracting the parents from having to deal with their marital problems. The drug abuse also serves to equilibrate the emotional distance between the spouses. When the parents feel
apart and need greater closeness, the child can unite them in a joint rescue mission to save the drug-abusing adolescent; when the parents need to increase their distance because things are getting too close, the drug abuser can come between them to give them emotional space.

Stanton (1978) and Stanton et al.'s (1982) research with families of heroin addicts has been identified as one of the best controlled studies in family therapy (Gurman & Kniskern, 1981). As a result of their investigation they formulated a new conceptual model explaining the nature of heroin addiction from a family system viewpoint. In this comprehensive model, called a homeostatic model, they took into account the repetitive family patterns of the structural family approach (Stanton & Todd, 1992).

In this model, drug misuse is predominantly a family phenomenon and becomes more apparent when the structure of the family system is considered. These are severely dysfunctional families. The prototypic drug-abuser family is one in which one parent is intensely involved with the abuser, while the other is more punitive, distant, or absent. Usually the overinvolved, indulgent, overprotective parent is of the opposite sex.

In the marital subsystem the abusing offspring may serve as a channel for their parents' communication. Usually parents of substance abusers have a very
disturbed marital relationship and they apparently detour their struggles through the offspring. The child can even serve as a spouse surrogate for one parent, thus allowing the other parent to maintain some sort of distance. Often the child's problem becomes the only cause around which the parents can unite and remain together. He rescues his family. Thus, he is a savior of the family's pain and suffering and a martyr (the ancient sacrificed scapegoat as a means of purification) who will take the family's worst with him when he leaves. If he dies, then his death is a noble one (Coleman & Stanton, 1978; Stanton, 1977).

When the child becomes the receptacle of the marital problems, the drug addiction involves three or more individuals, commonly the addict and his two parents or parent surrogates. Then the two subsystems, spouse subsystem and children subsystem, are highly interdependent and the marital battles become a functional part of the intergenerational or triadic family system. This pattern of interaction usually follows a sequence in which, when the addict improves, the parental figures start to separate; when he again becomes problematic, they shift focus from their own conflicts and join in directing their attention to him—at least until he again starts to improve, bringing the addiction cycle process back again. According to this model, the dysfunctional triadic cycle helps to maintain
the homeostatic balance of the family system.

Kaufman and Kaufman (1992, pp. 35, 36) summarized his observations about the common features of the family system with an addict member as follows:

1. The drug addict is often the symptom carrier of the family dysfunction.

2. The addict helps to maintain family homeostasis.

3. The addict member reinforces the parental need to control and continue parenting, yet finds such parenting inadequate for his or her needs.

4. The addict provides a displaced battlefield so that implicit and explicit parental strife can continue to be denied.

5. Parental drug and alcohol abuse is common and is directly transmitted to the addict or results in inadequate parenting.

6. The addict forms cross-generational alliances that separate parents from each other. The closest alliance is between mother and addict and precedes the addiction.

7. Parental death, divorce, or abandonment are common in the addict's early years (before drug use). Early sibling and paternal grandparent death is quite common.

8. Generational boundaries are diffuse—there is frequent competition between parents. Frequently the
crisis created by the drug-dependent member is the only way the family gets together and attempts some problem solving, or is the only opportunity for a "dead" family to experience emotions.


An analysis of the existing literature on Hispanic family and adolescent substance abuse shows similar findings as the literature reports with other populations. Flores-Ortiz and Bernal (1990) identified in the Hispanic families with substance-abusing adolescents many patterns present in the literature, such as absent father, a seemingly overinvolved mother-child dyad, and intergenerational conflicts. Delgado (1990) also reported frequent family disagreements, poor communication, unclear expectations of parents, and family disintegration as a result of an absent father.

Rio et al. (1990), working with Cuban families, found that adolescent substance abuse is associated with maladaptive family interaction patterns. They reported conditions and symptoms such as fragmentation of family organization, parental conflicts, spouse's emotional distance, strong alliance between the adolescent and one parent, and a breakdown of family hierarchy within the family system. They also found that the adolescent's drug abuse may even help to keep the family together in times of adversity because it provides the family with
Family Boundary

The notion of clarity of boundaries within a family structure is one of the most important parameters for evaluating family functioning and dysfunctioning used by Minuchin (1974). He conceives of all families as falling somewhere along a continuum whose poles are the extremes of diffuse boundaries and overly rigid boundaries. The extremes of enmeshment and disengagement indicate areas of potential pathology.

Kaufman's (1981) study of the effect of drug abuse on the family system involved a 4-year study of 75 families which included 78 heroin addicts. In this study he included subjects from different ethnoracial segments, including Hispanics. He found that, of the 75 families, 88% of the mothers were emotionally enmeshed with their drug-abusing children, mainly sons, to the extent that their happiness and emotional pain were totally dependent on the behavior and closeness with these children. Although 43% of the fathers were absent or emotionally disengaged from the drug abuser and the entire family, 41% of the fathers were enmeshed with the drug abuser, as well as the total family. Mothers tended to be enmeshed with addict children in all ethnic groups. Puerto Rican, Mexican American, and White Protestant fathers tended to be disengaged.
West et al.'s (1987) study with 35 families, in which all the patients were White and ranged from 12 to 25 years of age, found these families were moving toward an enmeshed type of relationship; 36% of the families demonstrated triangulation in which the patient was triangulated into his or her parent's spousal relationship, and 48% reported that their families would move in this direction. The study also suggested that these families are highly interdependent with fear of separation and individuation.

Flores-Ortiz and Bernal (1990), based on their own clinical experience and studies with Hispanic American families with substance-abusing adolescents, reported families who appear as an enmeshed family system with a mother-child overinvolvement dyad. Szapocznik, Santisteban, et al. (1989) also reported from their own work with Hispanic families, with substance-abusing adolescents enmeshed or overinvolved mother-son relationship, a distant father who tends to be excluded from the enmeshed relationship, and families that display an inability to resolve conflicts.

Other studies related to family factors and patterns of adolescent substance abuse, suggest that overinvolvement is not likely to be synonymous with emotional closeness, affection, mutuality, and open communication; overinvolvement does not guarantee that the substance abuser subject will perceive the
overinvolvement as parent affection (Brook, Gordon, & Brook, 1980; Brook, Whiteman, & Gordon, 1981; Piercy, Volk, Trepper, Sprenkle, & Lewis, 1991). However, family factors such as the degree of parental nurturance and support, parent-child communications, and quality of the parents' marriage have been found repeatedly to discriminate substance-abusing adolescents from nonsubstance-abusing adolescents (Barnes, 1984; Coombs & Landsverk, 1988; Glynn & Haenlein, 1988; Simcha-Fagan, Gersten, & Langner, 1986; Stanton, 1985).

Friedman et al. (1987) conducted a study with 96 adolescent drug-abuse clients and their families. They administered FACES II, based on Olson's Circumplex Model of family functioning, to the adolescents and their parents. They reported that the majority of these families categorized themselves as "disengaged" (rather than enmeshed) on the cohesion dimension, and as rigid (rather than chaotic) on the adaptability dimension. These findings were similar to Volk et al.'s (1989) study who found that families of substance-abusing adolescents are disengaged rather than enmeshed.

Family Adaptability

Adaptation or flexibility is another family condition that also appears to be related to adolescents' substance abuse. Flexibility refers to the ability of families to modify their interaction patterns when facing
new conditions (McCubbin, Thompson, Pirner, & McCubbin, 1988). Flexibility promotes change and development (Simon, Stierlin, & Wynne, 1985). In contrast, other studies indicate that the families of adolescent substance abusers tend to be more rigid (or less flexible) and have difficulty adapting to change (Bertle & Sabatelli, 1989).

The literature shows that families with substance-abusing adolescents have trouble letting the adolescent go to become more independent and a separate person. Adolescent drug abuse creates a developmental lag in teenagers' maturation, resulting in poor adolescent social skills and the creation of a family context characterized by disorganization, distance, and despair (Baumrind & Moselle, 1985; Liddle, Dakof, Parker, & Diamond, 1991).

Stanton et al. (1982) postulate that the onset of the addictive cycle appears in many cases at the time of adolescence and is intensified as issues of the addict's leaving home come to the fore. This developmental stage requires that the parents renegotiate their relationship; however, since the parents of the addict are unable to relate to each other satisfactorily, the family reacts with panic when the integrity of the triadic relationship is threatened. Then the family becomes stuck at this developmental stage in such a way that the addict remains intimately involved with them on a chronic basis. The
drug provides a solution at several levels to the dilemma of whether or not to allow him independence. Paradoxically, the drug permits the adolescent to simultaneously be both close and distant, "in" and "out," competent and incompetent, relative to his family of origin. The model called this condition pseudoindividuation or pseudo-independent behavior.

Substance abuse also affects negatively the adolescent sexual differentiation task. Stanton et al. (1982) indicated how substance abuse affects heterosexual relationships in this process of individuation. Addicts have been noted to be retreating from sexuality. Since the intense family ties serve to prevent the addict from developing appropriate relationships with spouses or offspring, it may be true that the drug produces a kind of sexual experience, which would partially explain the colorfully eroticized language and loving tenderness that addicts attach to various aspects of their habit. Through it they can have a quasi-sexual experience without being disloyal to their family and, most obviously, their mother. They do not have to form a heterosexual relationship but can relate sexually to the drug instead.

Ethnicity, Acculturation, and Adolescent Substance Abuse

Kaufman and Borders (1988, p. 99) indicated that ethnicity directly affects family attitudes toward sub-
stance abuse in two major ways. First, ethnicity affects
the family attitudes toward substance use and abuse,
which in turn affects adolescent patterns of drug intake.
Second, ethnicity affects family functioning which
affects adolescents' ego function, coping styles, and
vulnerability to substance abuse. For example, Mexican
youth are told that when they are old enough to earn a
living, they are old enough to drink (Gilbert, 1985).
Polish Americans believe that drinking is an expression
of freedom and individualism (Freund, 1985). Thus,
ethnic cultural patterns can directly enhance or prohibit
adolescent attitudes toward substance abuse. The effects
of ethnicity on family function in the U.S. depend on how
long the family has lived in this country and the type of
environment in which they live (Sluzki, 1979).

Kaufman and Kaufman's (1992) study with 75
families from different ethnic groups living in this
country, including Hispanics, found that family
functioning and family interactional patterns of narcotic
addicts vary in different ethnic groups. Coombs,
Paulson, and Richardson (1991) conducted a study with 446
Anglo and Hispanic youth, ages 9-17, and their parents in
California. The purpose of the study was to know the
relative influence of peer and parental influence on
youth's use of alcohol and other drugs. They found among
both groups that parental influence is more profound than
that of peers. However, Anglo and Hispanic subjects
differ on whose families' ideas are respected most. More Hispanics than Anglos respect their parents' views. Age and gender also account for a significant proportion of the variance between groups of drug use and ethnicity. These results reinforce the concept that family factors and ethnicity underlie youth substance abuse.

Acculturation and parent-child cultural disparity appear to play an important role in many cases of addiction (Stanton, 1979). Vaillant (1966b), based on his data with heroin addicts, noted that the rate of addiction for offspring of people who immigrated either from another country or from different sections of the United States was 3 times higher than the rate for immigrants themselves. Rosenberg (1969) also found higher rates of drug abuse among children of immigrants.

Scopetta, King, and Szapocznik (1977) compared acculturation scores between Cuban American parents and their problem offspring, and found significantly greater parent-child acculturation gaps within drug users' families than within families of adolescents with non-drug problems; the drug users were more acculturated, and their parents less so, compared with the psychiatric group. Families with the greatest intergenerational gaps in acculturation presented drug-abusing adolescents with high levels of acting-out pathologies and poor school adjustment (Szapocznik & Kurtines, 1980). Burnam, Hough, Karna, Escobar, and Telles (1987) reported that high
levels of acculturation were related to alcohol abuse and antisocial personalities.
CHAPTER III

METHODOLOGY

Type of Research

This chapter presents a description of the methodology used in this study, and describes the population and sample, instrumentation, and data collection. The hypotheses and data analysis procedures are then presented.

This was a correlational study in which findings from the Kinetic Family Drawing were compared to the findings of the Structural Family Interaction Scale-Revised (SFIS-R) and to the Family Adaptability and Cohesion Scales (FACES II). It was also an ex post facto study in which the clinical and non-clinical families were compared with the purpose of generating empirical evidence of the validity of the KFD, SFIS, and FACES II as instruments in the differential assessment of clinical and non-clinical families' interaction patterns.

Population and Sample

The sample for this study was 141 Hispanic American families with adolescent children aged 12 through 20 years old, who reside in Chicago, IL and South
Michigan. The clinical sample group consisted of 74 families with a substance-abusing adolescent under treatment in a clinical facility. The non-clinic sample group included 67 families with adolescent participants who were drug-free at the time of this study. The total sample in both groups included 260 subjects.

A random sampling of the population was not possible. Most of the mental health centers with substance abuse treatment programs for the Hispanic population contacted in five states were not willing to support and participate in this study. Of the 303 hospitals and mental health providers directly contacted by the researcher, only 3 (1%) showed real interest in this study. Additional efforts were made by the researcher, counselors, and educators, who volunteered to support this study to contact as many Hispanic families as possible in Illinois and Michigan, asking for their participation. However, a large segment of families was not willing to participate, particularly parents having children in substance abuse treatment programs. Final participation of any family member depended upon the willingness of parents and adolescents to cooperate. It took 15 months of intense work, personal contacts, home visitation, and sometimes very difficult negotiations with counseling centers with substance abuse services in order to generate the 260 subjects who participated in this study.
Instrumentation

Three instruments were administered in this study. All the subjects made a Kinetic Family Drawing (KFD), and completed the Structural Family Interaction Scale-Revised (SFIS-R) and the Family Adaptability and Cohesion Scales (FACES II). The instruction procedures for the KFD and the following inquiry questions related to the drawings were in English and Spanish. The SFIS-R and FACES II questionnaires, instructions, and answer sheets were also in both languages. The three instruments were used in order to generate validity data about the usefulness of the KFD as an instrument to measure structural family functioning according to Salvador Minuchin's model of family interaction (Minuchin, 1974). These instruments are now described in more detail.

Kinetic Family Drawing Scoring System

Description of KFDSS

The Kinetic Family Drawing was introduced by Burns and Kaufman (1970, 1972) as a projective procedure for exploring dynamics of family interactions by asking a subject to draw a picture of everyone in the family doing something. It has also proved to be a useful instrument to assess family functioning in terms of family system constructs.

The Kinetic Family Drawing Scoring System (KFDSS) has been designed for use in evaluating family drawings...
along four structural patterns of family functioning: family hierarchy, family subsystems, family boundaries, and family adaptability.

The Family Hierarchy construct is concerned with the distribution of authority and the inversion of power within the structural family system.

The Family Subsystems construct is concerned with the way in which the family members organize, interact, resolve conflicts, and form possible faulty alliances across generations involving parent-children in alignments such as triangulations, coalitions, or detouring issues. Thus, family subsystem organization, proximity, degree of family members' centralization, isolation or separation of family members, boundaries demarcations and rigid collusions are all relevant concepts in the present study.

The Family Boundaries construct is concerned with boundaries between individuals and subsystems and with family members' differentiation within the family system. Boundaries can be viewed as being a continuum from enmeshed to disengaged. The family boundary may serve as a gatekeeper function, controlling interactions and communication flow into and out of the system, while maintaining adequate interdependence and separateness.

The Family Adaptability construct is concerned with the degree to which the family structure is flexible and able to change. This adaptation process is related
to the family system and subsystems ability of realignment its distribution of power structure, role functions, rules interactions, and responses to new life conditions and developmental changes.

When administering the KFD, the drawings are obtained from the subjects individually. The subject is asked to be seated on a chair at a table of appropriate height. A sheet of plain white, 8-1/2 x 11-inch paper is placed on the table directly in front of the subject. A No. 2 pencil is placed in the center of the paper and the subject is asked to "Draw a picture of everyone in your family, including yourself, DOING something. Try to draw whole people, not cartoons or stick people. Remember, make everyone DOING something--some kind of action" (Burns & Kaufman, 1972, p. 5). Once the drawing is completed, the subject is asked to explain the drawing to the examiner.

More information about the KFD, including historical development issues, reliability, validity, cross cultural studies, and rationale for a KFD Structural Scoring System (KFDSSS), is found in chapter 2.

**Development of the KFDSSS**

The Kinetic Family Drawing Structural Scoring System (KFDSSS) is based on already-existing drawing scoring methods. It consists of adaptation of the format and content of those items which will provide for a more
efficient instrument for use in the assessment of family drawings protocols. In total, the KFDSSS is composed of 36 variables that specifically relate to the four dimensions of structural family functioning.

The variables for the KFDSSS are from the following five scoring system interpretation methods. Variables related to size of figure, distance between figures, vertical displacement, orientation, individual differentiation features, postures differentiation, general boundaries differentiation, gender differentiation, and sexual differentiation are from Schwartz's (1981) Manual for a Systems Scoring of the KFD. The inter-rater reliabilities for her scoring system variables range from .68367 on the orientation scale to .99705 on human figures, with an overall of 0.87078 alpha coefficient for her research protocols.

Variables related to the activity level of the father, the mother, and the IP adolescent as well as scoring criteria for the activity level of figures are from the system of Ledesma (1979), who adapted this category from O'Brien and Patton's scale (1974). Interscorer reliabilities for these items were .99 for the activity level of the father, .99 for the activity level of the mother, and .94 for the activity level of the IP adolescent.

Variables related to compartmentalization and encapsulation are from Myers's (1978) scoring system.
Variables related to nurturance level, cooperation level, and Like-To-Live-in-Family are from Burns's (1982) scoring method. And, finally, variables related to type of barriers between mother and father, type of barriers between IP adolescent and father, and type of barriers between IP adolescent and mother are from Cho's (1987) alternative scoring system adapted from Burns's method (1982).

**Variables**

The variables used in this study could be identified according to family hierarchy, family subsystems, family boundaries, and family adaptability. Variables related to distance between figures were listed under different categories as noted (*) for interpretation purposes. The 37 KFDSSS variables are (see Table 2):

**Scoring of KFDSSS**

The family drawing protocols were evaluated according to the Kinetic Family Drawing Structural Scoring System (KFDSSS) Instructions, described more thoroughly in Appendix C.

Every attempt was made in this study to score and evaluate in an objective manner. The rationale for scoring and for qualitative analysis was based on the KFD Structural Scoring System (see Appendix) as well as in the literature related to this study. To corroborate the researcher's objectivity, all the drawings were also
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Hierarchy</strong></td>
<td></td>
</tr>
<tr>
<td>SIZDAD</td>
<td>Size of the father figure</td>
</tr>
<tr>
<td>SIZMOM</td>
<td>Size of the mother figure</td>
</tr>
<tr>
<td>SIZIP</td>
<td>Size of the IP child</td>
</tr>
<tr>
<td>VDISD</td>
<td>Vertical displacement of the father figure</td>
</tr>
<tr>
<td>VDISM</td>
<td>Vertical displacement of the mother figure</td>
</tr>
<tr>
<td>VDISIP</td>
<td>Vertical displacement of the IP child</td>
</tr>
<tr>
<td><strong>Family Subsystem</strong></td>
<td></td>
</tr>
<tr>
<td>DISDM</td>
<td>Distance between father and mother</td>
</tr>
<tr>
<td>DISDIP</td>
<td>Distance between father and IP child</td>
</tr>
<tr>
<td>DISMIP</td>
<td>Distance between mother and IP child</td>
</tr>
<tr>
<td>CDISD</td>
<td>Central displacement, father figure</td>
</tr>
<tr>
<td>CDISM</td>
<td>Central displacement, mother figure</td>
</tr>
<tr>
<td>CDISIP</td>
<td>Central displacement, IP child</td>
</tr>
<tr>
<td>TBRRM</td>
<td>Type of barriers between mother and father</td>
</tr>
<tr>
<td>TBRRMIP</td>
<td>Type of barriers between father and IP child</td>
</tr>
<tr>
<td>TBRRMIP</td>
<td>Type of barriers between mother and IP child</td>
</tr>
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<td>COMPART</td>
<td>Compartmentalization of figures</td>
</tr>
<tr>
<td>ENCAPS</td>
<td>Encapsulation of individual figures</td>
</tr>
<tr>
<td><strong>Boundaries</strong></td>
<td></td>
</tr>
<tr>
<td>DISDM *</td>
<td>Distance between father and mother</td>
</tr>
<tr>
<td>DISDIP *</td>
<td>Distance between father and IP child</td>
</tr>
<tr>
<td>DISMIP *</td>
<td>Distance between mother and IP child</td>
</tr>
<tr>
<td>DIFFS</td>
<td>Differentiation score</td>
</tr>
<tr>
<td>INDFEA</td>
<td>Individual features</td>
</tr>
<tr>
<td>DIFPOS</td>
<td>Different positions</td>
</tr>
<tr>
<td>GENBON</td>
<td>Generational boundaries</td>
</tr>
<tr>
<td>DIFSEX</td>
<td>Gender differences</td>
</tr>
<tr>
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<td>Orientation father and mother</td>
</tr>
<tr>
<td>ORDIP</td>
<td>Orientation father and IP child</td>
</tr>
<tr>
<td>ORMIP</td>
<td>Orientation mother and IP child</td>
</tr>
<tr>
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<td>Nurturing father</td>
</tr>
<tr>
<td>NURMOM</td>
<td>Nurturing mother</td>
</tr>
<tr>
<td>NURIP</td>
<td>Nurturing IP child</td>
</tr>
<tr>
<td>COOPDAD</td>
<td>Cooperation father</td>
</tr>
<tr>
<td>COOPM0</td>
<td>Cooperation mother</td>
</tr>
<tr>
<td>COOPIP</td>
<td>Cooperation IP child</td>
</tr>
<tr>
<td><strong>Family Adaptation</strong></td>
<td></td>
</tr>
<tr>
<td>SEXCAR</td>
<td>Sexual characteristics</td>
</tr>
<tr>
<td>ACFTDAD</td>
<td>Activity level of the father</td>
</tr>
<tr>
<td>ACTMOM</td>
<td>Activity level of the mother</td>
</tr>
<tr>
<td>ACTIP</td>
<td>Activity level of the IP child</td>
</tr>
<tr>
<td>DISDM *</td>
<td>Distance between father and mother</td>
</tr>
<tr>
<td>DISDIP *</td>
<td>Distance between father and IP child</td>
</tr>
<tr>
<td>DISMIP *</td>
<td>Distance between mother and IP child</td>
</tr>
<tr>
<td>LILIF</td>
<td>General impression of family satisfaction (like-to-live in family)</td>
</tr>
<tr>
<td>HMFIG</td>
<td>Number of human figures</td>
</tr>
</tbody>
</table>

* Variables repeated for interpretation purposes.
scored and evaluated by a professional independent rater who was not aware of the hypothesis and was trained to evaluate and score the KFD Family Drawings.

This section includes a summary of the scoring criteria for KFD variables as they relate to structural dimensions of family functioning (see Table 3).

Family Hierarchy

The distribution of authority within the structural family system was evaluated in the following ways:

1. By relative size. The relative size of the figure measures in centimeters the height of a KFD figure corrected the number of human figures in the drawing. Theoretically it is thought to reflect the power, importance, and status of the represented person (Schwartz, 1981).

2. By the vertical displacement. The vertical displacement measures in centimeters the vertical distance from the bottom of the page to the top of the figure. Theoretically it reflects the power or the importance of the represented person (Schwartz, 1981).

Family Subsystems

Family subsystems organization, interaction patterns, and alignments were evaluated in the following ways: (See Table 1, page 127.)

1. By figure distance. The distance regulation
<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>Hierarchy</th>
<th>Subsystems</th>
<th>Boundaries</th>
<th>Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of the father</td>
<td></td>
<td></td>
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<tr>
<td>Size of the mother</td>
<td></td>
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<tr>
<td>Size of the IP child</td>
<td></td>
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<tr>
<td>Vertical displacement of the father</td>
<td></td>
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</tr>
<tr>
<td>Vertical displacement of the mother</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Vertical displacement of the IP child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance between father and mother</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance between father and IP child</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Distance between mother and IP child</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central displacement, father</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Central displacement, mother</td>
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<tr>
<td>Central displacement, IP child</td>
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<tr>
<td>Type of barriers between mother and father</td>
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<tr>
<td>Type of barriers between mother and IP child</td>
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<td></td>
</tr>
<tr>
<td>Compartmentalization of figure</td>
<td></td>
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</tbody>
</table>

**TABLE 3**

KINETIC FAMILY DRAWING VARIABLES RELATED TO STRUCTURAL FAMILY CONCEPTS
<table>
<thead>
<tr>
<th>Variables</th>
<th>Hierarchy</th>
<th>Subsystems</th>
<th>Boundaries</th>
<th>Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encapsulation of individual figures</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation father and mother</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Orientation father and IP child</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Orientation mother and IP child</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Individual features</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Different positions</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Generational boundaries</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gender differences</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nurturing father</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nurturing mother</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nurturing IP child</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cooperation father</td>
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<td>X</td>
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</tr>
<tr>
<td>Cooperation mother</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cooperation IP child</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sexual characteristics</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Activity level of the father</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Activity level of the mother</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Activity level of the IP child</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>General impression of family satisfaction</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
measures in centimeters the linear distance between figures corrected for figure size and in part for the number of figures in the drawing. Theoretically it is to reflect emotional closeness or distance between people represented in the drawings (Schwartz, 1981).

2. By central displacement. The central displacement or horizontal displacement measures in centimeters the figure's distance from the central vertical axis of the page. Theoretically, it is thought to reflect the extent to which the represented figure is central to the family's functioning (Schwartz, 1981).

3. By type of barriers. Barriers refers to lines, walls, or objects which completely block the flow of energy or the ability to interact between figures. Theoretically it is thought to reflect isolation, conflicts, defensiveness (Burns & Kaufman, 1970, 1972; Reynolds, 1978).

4. By compartmentalization of figures. Compartmentalization means that the subjects draw lines dividing each member of the family from others, or one or two members from the rest. Theoretically it is thought to reflect isolation, rejection, conflicts, and concerns with relationships (Burns & Kaufman, 1970, 1972; Burns, 1982; Reynolds, 1978).

5. By encapsulation. Encapsulation means that an individual figure is in some way enclosed as in a car or in some way structurally surrounded. Theoretically it is thought to reflect isolation, rejection of threatening

**Family Boundaries**

The boundaries and differentiation within the structural family system were evaluated in the following ways:

1. By regular distance. The distance regulation measures in centimeters the linear distance between figures. Theoretically it is thought to reflect emotional closeness or distance between the designated figures (Gardano, 1988; Schwartz, 1981).

2. By differentiation of figure characteristics. The differentiation scale measures the number of features or characteristics which distinguish KFD figures from each other. This scale score integrates the sum of the individual differentiation variable, postures differentiation variable, general boundaries variable, and gender differentiation variables scores. Theoretically it is thought to reflect individuality and autonomy of people represented (Schwartz, 1981).

3. By figure orientation. This refers to whether the identified figure is turned toward or away from the designated major figures. Theoretically it is thought to reflect interaction, self-concept, and communication (Knoff & Prout, 1985; O'Brien & Patton, 1974).
4. By nurturing level. This refers to family members providing support and nurturance of each other and working out disagreements at home. Theoretically it is thought to reflect that family members are supportive and feel close to each other (Olson et al., 1992).

5. By cooperation level. This refers to family members sharing interests and hobbies with each other. Theoretically it is thought to reflect family cohesion, emotional bonding and common interest, and recreation (Olson, Portner, & Bell, 1992).

Family Adaptability

Family flexibility and change were evaluated in the following ways:

1. By distance regulation. This refers to the distance regulation variable which measures linear distance between the adolescent figure and parent figures. Theoretically it is thought to reflect closeness or separateness toward adolescent developmental changes and need for increased independence (Schwartz, 1981).

2. By sexual characteristics. The sexual differentiation score measures the number of sexually distinguishing features among the father, mother, and child figures. Theoretically it is thought to reflect the extent to which sex differences, sexuality, and autonomy are acknowledged in the family (Schwartz, 1981; Thompson, 1975).

3. By activity level. This refers to movements
of energy between people and objects. Theoretically it is thought to reflect such things as inhibition, anger, competition, negotiation style, and family relations patterns.

4. By Like-To-Live-In Family. This refers to the general impression of family functioning and satisfaction in the KFD family. Theoretically it is thought to reflect family dynamics and relationships.

Structural Family Interaction Scale-Revised

Description

The SFIS-R instrument was developed by Perosa, Hansen, and Perosa (1981), and revised by Perosa and Perosa (1987) for identifying ways in which family members interact with one another within the structural family system. It contains an 85-item questionnaire with eight scales which operationalized Minuchin's Structural Family Theory as follows:

1. Very true of our family
2. More true than false of our family
3. More false than true of our family
4. Very false of our family

The questionnaire contains eight scales which operationalized Minuchin's Structural Family Theory as follows:

1. Enmeshment/Disengagement scale assesses the
family system's resonance, sensitivity, and differentiation to determine where the family boundaries fall on the continuum between enmeshment and disengagement.

At one extreme, boundaries can be either too permeable or almost nonexistent; this is called enmeshment. Here there is a high degree of responsiveness and involvement among family members. At the opposite extreme, boundaries are too rigid or impermeable, this is called disengagement.

2. The Parent Coalition/Cross-Generational Triads scale assesses the degree to which boundaries between parents and child are crossed to form a rigid triad pattern of interaction.

Parent coalition or parent management describes a firm parent subsystem cooperating to manage household executive responsibilities and needs. Parents support each other in managing family decisions and tasks. Although parents may have disagreements, they do not involve the children, forcing them to take parental roles. Parent-child boundaries are maintained (Perosa, 1980).

It is the opposite of cross-generational triads, whereby the child crosses over the boundary separating the parent subsystem. Triangulation, parent-child coalition, and detouring are forms of cross-generational triads.

3. The Father-Child Cohesion/Estrangement scale
assesses the degree to which the father provides nurturance and support and resolves disagreements with the child.

4. The Mother-Child Cohesion/Estrangement scale assesses the degree to which the mother in the family provides nurturance and resolves differences with the child so that both feel close to each other.

5. The Spouse Conflict Resolved/Unresolved scale assesses the degree to which conflicts between spouses are resolved satisfactorily.

In conflict resolution, spouses recognize what behaviors anger others and negotiate differences of opinion, disagreements, and conflicts. Emotions are expressed openly and issues are resolved satisfactorily (Perea, 1980; Szapocznik, Kurtines, et al., 1989).

Spouses with unresolved conflicts deny having arguments and they do not negotiate or confront areas of disagreement. Spouses either do not express anger or express it but in ways that do not compromise or settle their differences properly. Conflict between spouses was defined as disagreements, expression of hostility, unwillingness to listen to one another, and tendency to ignore one another (Perea, 1980; Szapocznik, Kurtines, et al., 1989).

6. The Flexibility/Rigidity scale assesses the degree to which the system's flexibility is revealed by the reshuffling and adaptation of the system's alliances,
coalitions, and subsystems in response to demands imposed by internal and external tasks and changing circumstances.

Flexibility is a measure of the family ability to change and reorganize to meet changing needs and to perform different tasks (Szapocznik, Kurtines, et al., 1989).

Rigidity is manifested in the inability of these families to adjust by developing appropriate and adaptive interactive patterns or functional structures. Change and spontaneity are not allowed. Alliances among members do not change (Perosa, 1989; Szapocznik, Kurtines, et al., 1989).

7. The Family Conflict Avoidance/Expression scale assesses the degree to which family members avoid or express differences within the family.

Family conflict avoidance describes the inability or unwillingness to resolve conflicts and to negotiate differences. Problems are left unresolved because of the family system's avoidance attitude. Often one spouse or member is the one to avoid and deflect the confrontation and negotiation (Perosa, 1980).

The Expression scale deals with members' ability to express their emotions, behavior, and issues that lead to satisfactory resolutions.

8. The Overprotection/Autonomy scale measures the degree of differentiation within the family.
Petrosa (1980) and Petosa et al. (1981) used Minuchin's (1974) and Minuchin et al.'s (1967) structural family functioning model as the guiding theory for developing the Structural Family Interaction Scale. The purpose of the instrument is to measure perceived interaction patterns in families. It focuses primarily upon the interaction between the individual and his/her family environment (Nelson & Utesch, 1990).

The authors wrote 200 items to operationalize 13 concepts: enmeshment, disengagement, neglect, overprotection, rigidity, flexibility, parent conflict avoidance, parent conflict without resolution, parent conflict resolution, parent-management, triangulation, parent-child coalition, and detouring. The 200 items, along with a description of each of the 13 concepts, were given to six family therapists who were asked to categorize each statement and to rate the degree of fit. Items were selected if four of the six judges agreed upon item fit. For each item, interjudge agreement ranged from .81 to 1.00. The overall interjudge agreement for the 95 retained items was .95. These 95 items were divided into 13 scales corresponding to the 13 structural concepts listed earlier (Petrosa et al., 1981). The alpha reliability coefficient for the scales of the final instrument ranged between .81 and .92, with test-retest reliabilities ranging from .70 to .90 (Nelson & Utesch, 1990).
The sample for a pilot study consisted of 50 volunteer families from western New York City and its suburbs. The majority of the families were Anglo-Saxon, Protestant and Catholic, college-educated, middle-class, intact families with one, two, or three children. The format of the Structural Family Interaction Scale administered to these families was not described, but the authors stated that the intercorrelations between subscales "ranged from substantial to high and followed the relationships predicted by Minuchin's model" (Perosa et al., 1981, p. 80).

Data from the pilot study were used to construct a 65-item Structural Family Interaction Scale. The authors added 20 new items "to make items more accurately portray specific family interaction patterns" (p. 81). These 20 items were used to construct 10 two-item secondary scales: mother overprotection, father overprotection, mother neglect, father neglect, parents conflict avoidance, parents-children conflict avoidance, parents conflict expression without resolution, parents-children conflict expression without resolution, parents conflict resolution, and parents-children conflict resolution.

Then the Structural Family Interaction Scale was administered to 50 families. In each family, both parents and two children completed the instrument. The sample was diverse with 25 families having a child with a
learning disability and the other half of the sample without. The average age of the learning disabled child was 12 years, while the average age of the child in other families was 12.8 years. According to Perosa et al. (1981), most of the primary and the majority of the secondary scales in the instrument had met the alpha score criterion of .5 for internal consistency reliability. At the time of the present study, no test-retest reliability publication figures exist. Future research studies are planned for achieving criterion-related validity. However, in terms of construct validity, the authors stated that "inter-scale correlations do fall into patterns predicted by Minuchin" (Peroسا et al., 1981, p. 89).

The revised version (Peroسا & Perosa, 1990) of the Structural Family Interaction Scale (SFIS) is a self-report inventory designed to measure Minuchin's structural dimension of family functioning. The eight scales comprising the SFIS-R and their Cronbach's (1951) alpha coefficients are: (1) Enmeshment/Disengagement (.93); (2) Parent Coalition/Cross-Generational Triads (.81); (3) Father-Child Cohesion/Estrangement (.71); (4) Mother-Child Cohesion/Estrangement (.85); (5) Spouse Conflict Resolved/Unresolved (.90); (6) Flexibility/Rigidity (.81); (7) Family Conflict Avoidance/Expression (.82); and (8) Overprotection/Autonomy (.76). Test-retest estimates based on a college sample at 4 weeks' interval
range from .80 to .92 and interscale correlations are moderate (.32 to .61) (Perosa & Perosa, 1990b).

Perosa (1980) described the relationship between some of the subscales. In general, the intercorrelation between subscales followed the relationship predicted by Minuchin's model. Each scale extreme should be related negatively to its polar opposite or other subscales.

Enmeshment has its strongest positive relationship with conflict resolution, flexibility, and parent management. It has its strongest negative relationship with disengagement, neglect, conflict expression without resolution, rigidity, parent-child coalition, and detouring.

Parent coalition or parent management related negatively to triangulation, parent-child coalition, and detouring. Parent management correlates positively with flexibility, enmeshment, and conflict resolution, and negatively with conflict expression without resolution, triangulation, parent-child coalition, and detouring. Triangulation parallels parent-child coalition, detouring, conflict expression without resolution, and rigidity positively, and parent management negatively. Parent-child coalition correlates with rigidity, detouring, and triangulation. It is negatively related to conflict resolution and parent management. Detouring is connected positively with rigidity, parent-child coalition, conflict expression without resolution,
disengagement, and triangulation. It is associated in a negative way with conflict resolution.

Father and mother estrangement or "neglect" ties positively with conflict expression without resolution, disengagement, and rigidity, and negatively with enmeshment.

Conflict resolution blends most positively with enmeshment, flexibility, parent management, on the one hand, and most negatively with conflict expression without resolution, disengagement, detouring, parent-child coalition, and rigidity, on the other.

Flexibility holds together positively with conflict resolution, parent management, and enmeshment. Rigidity is linked powerfully in the positive direction with detouring, parent-child coalition, conflict expression without resolution, disengagement, neglect, and triangulation.

Mother overprotection is positively correlated with father overprotection, and most negatively with mother neglect or estrangement. Father overprotection replicates the mother's pattern of overprotection and negatively with father neglect or estrangement.

Perosa (1995) also suggested to me in writing for data analysis purposes the following combination of scales as they related to the research questions and variables under study:

1. Hierarchy, concerned with family authority
and generational hierarchy reversal. Use: Parent Coalition/Cross-Generational Triads scale.

2. Subsystems, concerned with family patterns of interaction and inappropriate alignments across generation. Use three scales: Spouse Conflict Resolved/Unresolved; Mother-Child Cohesion/Estrangement; and, Father-Child Cohesion/Estrangement.

Perosa, however, only provided to the researcher a handwriten outline with the name of the variables without further instructions about the rationale for this variable combination and the effectiveness of this subsystem construct in analyzing Minuchin's view of faulty coalitions.


4. Adaptability, concerned with the family degree of flexibility to adapt its structure to internal and external changes and tasks. Use: Flexibility/Rigidity scale.

The original SFIS has been used to differentiate a variety of dysfunctional families from healthy families (Kramer, 1983; Perosa & Perosa, 1982; Walrath, 1984). In addition, the SFIS and the SFIS-R have been used successfully to identify variables related to the psychological well-being of the adolescent family member and have been found useful in advancing family theory.
Translation of SFIS-R to Spanish

The SFIS-R (Peroza & Peroza, 1990b) was translated from English to Spanish under my supervision. Three different persons were asked to translate the instrument from English to Spanish for this study before a final version was accepted. One translation was done by myself and my wife, who has a B.A. in high-school education with a major in Spanish from New York State University and a B.S. in Pharmacy from Ohio State University; and another at Andrews University by a bilingual secretary familiar with this work; and a third one by a professor of Spanish at Ohio State University (Columbus, Ohio), Language Department.

My wife and I reviewed all three translations and prepared a final version which was given to Dr. David Garrison, an American professor with a Ph.D. in Spanish from Johns Hopkins University, and at the time professor of Spanish at Wright State University (Dayton, Ohio). Dr. Garrison is fluent in both English and Spanish. He was asked to translate the Spanish version of SFIS-R into English in order to compare his translation with the original in English. Dr. Garrison did his translation without having access to the English version of Peroza's instrument.

After his translation, he reviewed his English
version with the original in conjunction with me. It was found that the translations coincided in meaning almost exactly, with only two minor changes (see Appendices, Dr. David Garrison certification letter). The final version of the SFIS-R in Spanish was given to four Spanish families in Chicago by myself and the counselors who cooperated with this study, and was found to be a suitable instrument for the purpose of this study.

Scoring

The respondent was asked to circle the appropriate answer for each statement along a Likert scale containing the following categories: A = Very true of our family; B = More true than false; C = More false than true; and D = Very false. The scoring for each item is A = 4; B = 3; C = 2; and D = 1.

The SFIS-R scales are regarded as being linear. Higher scores on the scales are concerned with conflicts being resolved, and lower scores on scales showing conflicts being avoided rather than being faced directly by family members (Peroza & Perosa, 1990). Table 4 shows the SFIS-R scale ranges given by Perosa to me in writing at the University of State of Ohio (Columbus) in April 1996.

Since the authors did not publish the SFIS-R's new scoring system, the only way offered for scoring and interpretation was to send the subjects' data to Ohio
State University (Ohio) where they were scored by computer under Dr. Perosa's supervision. This analysis of the data by Dr. Perosa took about 3 months to complete.

TABLE 4
SFIS-R SCALES RANGES

<table>
<thead>
<tr>
<th>Scales</th>
<th>Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment/Disengagement (E/D)</td>
<td>68 - 17</td>
</tr>
<tr>
<td>Parent-Coalition/Cross-Generational Triads (PC/CGT)</td>
<td>44 - 11</td>
</tr>
<tr>
<td>Father-Child Cohesion/Estrangement (FCC/E)</td>
<td>40 - 10</td>
</tr>
<tr>
<td>Mother-Child Cohesion/Estrangement (MCC/E)</td>
<td>32 - 8</td>
</tr>
<tr>
<td>Spouse Conflict Resolved/Unresolved (SPCR/UN)</td>
<td>40 - 10</td>
</tr>
<tr>
<td>Flexibility/Rigidity (FE/RI)</td>
<td>36 - 9</td>
</tr>
<tr>
<td>Family Conflict Avoidance/Expression (FCA/E)</td>
<td>36 - 9</td>
</tr>
<tr>
<td>Overprotection/Autonomy (O/A)</td>
<td>36 - 9</td>
</tr>
</tbody>
</table>

Family Adaptability and Cohesion Scales

Description

The Family Adaptability and Cohesion Scales (FACES II) is a short self-report instrument of 30 items with a 5-point response scale, based on Olson's Circumplex Model (Olson et al., 1992), developed to
provide an "insider perspective" on family functioning as perceived by family members. It measures two central dimensions: adaptability and cohesion.

Family cohesion assesses the degree to which family members are separated from or connected to their family. Family cohesion is defined as "the emotional bonding that family members have toward one another" (Olson et al., 1992, p. 1). The cohesion scale contains 16 items used to diagnose and measure the following eight cohesion concepts: emotional bonding, boundaries, coalition, time, space, friends, decision-making, interest, and recreation (Olson et al., 1992).

Family adaptability (change) has to do with the extent to which the family system is flexible and able to change. Family adaptability is defined as: "the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson et al., 1992, p. 1). The adaptability scale contains 14 items used to diagnose and measure six adaptability concepts: family power (assertiveness), control, discipline, negotiation style, role relationships, and relationship rules (Olson et al., 1992).

Development

FACES II was developed in 1981 to create a short instrument with simple sentences so that FACES II could
be used with children and adults with limited reading ability. The authors reduced the number of double negatives that had appeared in many of the questions in the original FACES. An additional goal was to develop a scale that was empirically reliable, valid, and had independent dimensions (Olson et al., 1992).

During the initial development of FACES II, 464 adults responded to 90 items, covering the 15 content areas of cohesion and adaptability with six items per content area, some of which were items from the original FACES. The average age of respondents was 30.5. On the basis of factor analysis and item analysis, the initial scale was reduced to 50 items. Cronbach's alpha reliabilities were .91 for the Cohesion subscale and .80 for the Adaptability subscale.

This 50-item scale of FACES II was administered to 2,412 individuals in a national survey. Factor analysis and item analysis were performed, and FACES II was reduced to a 30-item scale. The final version of FACES II includes two subscales (cohesion with 16 items and adaptability with 14 items) with 14 content areas (2-3 items each).

Two types of reliability have been reported for FACES II. The total national sample of 2,412 was divided into two equal subgroups to check internal consistency (Cronbach Alpha). The reliabilities for the total sample and both subgroups were from .78 to .90. A test-retest
study was conducted in the fall of 1981, using the 50-item version. The time lapse between the first and second administration of FACES II was 4 to 5 weeks. Respondents were 124 university and high-school students (average age, 19.2 years) who were asked to describe their families of origin. The Pearson correlation for the 50-item FACES II was .84; the Pearson correlations for the Cohesion and the Adaptability subscales were .83 and .80, respectively.

According to Olson et al. (1992), the concurrent validity for FACES II is good (linear relationship) and is higher than for the FACES III, especially for family adaptability. That is, other instruments which measure constructs similar to cohesion and adaptability correlate higher with FACES II than FACES III. Hampson, Hulgers, and Beavers (1991) compared the Dallas Self-report Family Inventory (SFI) with both FACES II and FACES III, and found the concurrent validity for FACES II higher than for FACES III, especially for family adaptability.

FACES II has been used by researchers and clinicians to assess a variety of family systems issues, including families with substance-abusing adolescents. These studies showed the validity of the instrument to measure the linear nature of the family dimensions of cohesion and adaptability (Carnes, 1987; Clarke, 1984; Friedman et al., 1987). In addition, this instrument proved to be culturally relevant to a variety of families.
with different ethnic and cultural backgrounds. The instrument has been translated and used with Spanish populations (Olson et al., 1989).

**Translation to Spanish**

The translation of FACES II into Spanish was done by Dr. Guillermo Bernal, Assistant Professor, Department of Psychiatry, University of California, San Francisco, under the direction and supervision of the University of Minnesota Family Social Science Department. The Spanish version sent to me by the University of Minnesota for the purpose of using it in this study was given to four families in Chicago and was found to be a reliable instrument for use with the Spanish population.

**Scoring**

The instrument was offered to the subjects in English and Spanish, depending on their language preference. The administration was conducted with each subject individually to maintain confidentiality.

FACES II was designed in the form of a Likert scale containing the following answer categories: "Almost Never," "Once in a While," "Sometimes," "Frequently," and "Almost Always." The instrument was easy to administer and easily followed by the subjects. All the parents and adolescents who cooperated in this study completed the questionnaires in a short time and with few questions.

Recent empirical evidence supports a linear
scoring and interpretation of FACES II (Olson et al., 1992). According to the linear scoring guidelines offered by the authors, high scores on the adaptability and cohesion dimensions are reinterpreted as "very connected" and "very flexible." The cutting points for the four levels of cohesion and adaptability remain the same, except that categories of enmeshed and chaotic are no longer measured with FACES II.

The following are the directions followed by the researcher to obtain the subjects' answer scores:

The Cohesion subscale of 16 items consists of all the odd numbered items plus item 30. All these items are scored in the positive direction, except for items 3, 9, 15, 19, 25, and 29, which are scored in the negative direction.

The Adaptability subscale of 14 items consists of all the even numbered items except item 30. All are scored in the positive direction, except items 24 and 28, which are scored negatively (see Appendix, Faces II—Scoring and Interpretation).

Data Collection

Using the National Directory of Drug Abuse and Alcoholism Treatment and Prevention programs (1992) published by the U.S. Department of Health and Human Services as a reference resource, contact was made by phone to mental health centers with drug abuse treatment
programs for Hispanics in Illinois, Indiana, Florida, Michigan, New York, New Jersey, and Washington, DC. My daughter Dina and I made more than 500 telephone calls in order to verify the substance abuse services for Hispanics offered by those facilities, the name of clinical directors, and interest in research studies with Hispanic families. Only a few directors made themselves available to talk about this study.

Finally, 303 drug abuse treatment and prevention facilities from Florida, Indiana, Illinois, Michigan, and Ohio were selected based upon their treatment programs, Hispanic population level, and interest in research studies. A package with all the information and a return stamped postcard were mailed to each of the drug abuse treatment facilities identified before, to the attention of the clinical director. Of the 303 facilities contacted, 56 (18%) sent back the return postcards indicating that they could not participate in this research study. Only three (1%) facilities, two from Chicago, Illinois, and one from northern Ohio, supported the study. After a telephone call to those three clinic directors who were well identified with the package instructions, only two facilities in Chicago, Illinois, were visited by the researcher to start the research study. Another 38 counseling centers and facilities were contacted in Chicago, IL, and Michigan to make possible the study.

The clinical sample of 74 families having
substance-abusing adolescents was recruited through the cooperation of those facilities in Chicago, Illinois, and in Michigan which supported this study. These mental health facilities offered substance abuse treatment programs for Hispanics and were approved by the state. Administrators, clinical directors, and substance abuse counselors were contacted with the purpose of getting their support, their cooperation to contact the families of substance-abusing adolescents, and with a request for permission to use their facilities for testing. All received a package of the research study and full information by the researcher about the purpose of the study.

Those substance abuse counselors and clinical directors who volunteered to help with the testing process were trained by the researcher in a special session. Those counselors who agreed to cooperate in the study contacted personally or by telephone the parents of those adolescents in treatment who were diagnosed as having a substance abuse problem. Parents and adolescents were informed about the purpose of the study, instruments, time, and confidentiality issues. They were also informed about an incentive offered of $15.00 per family.

All the adolescents in treatment who agreed to participate, as well as the majority of the parents who participated, were tested at the clinic facilities. Only a few parents were interviewed in their homes because of...
work schedule difficulties. The KFD instructions and inquiry phase, the SFIS-R, FACES II, and demographic information were offered in English or Spanish, depending on their language preference. Generally, adolescents requested materials and questionnaires in English, and parents in Spanish. Data collection was conducted with each subject individually to maintain confidentiality and to ensure valid test results. In some cases I administered the tests and in other cases the agency counselor did. When I could not be present, I personally picked up the protocols and discussed the results with the counselor. To ensure anonymity, each participant was identified only by first name and a code number. The name was dropped from the data analysis and test results information.

The non-clinic sample of 67 families, having adolescents who were drug-free at the time of this study, was recruited through friends, referrals, public schools with Hispanic students, and direct telephone calls to Hispanic families using different directories and lists offering information about the Hispanic population in Chicago, Illinois, and Michigan. I personally contacted all the families to inform them about the testing process, time, and confidentiality issues. They were also informed about their voluntary participation and a compensation of $15.00 to each family or members of the family.

The majority of the families were interviewed in
their homes, where each measure was administered to the participants simultaneously and individually. A few were tested at the school facilities with the cooperation of school teachers. They were also asked to complete the KFD, the Structural Family Interaction Scale-R (SFIS-R), Family Adaptability and Cohesion Scales (FACES II), and the Demographic Family Information. All the non-clinic families were tested by the researcher or under the researcher's personal supervision. Again, adolescents generally chose instructions and questionnaires in English, and the parents in Spanish. Testing was also done in a way to preserve confidentiality and anonymity. I collected all the protocols after the testing process. The protocols and answer sheets were coded with numbers for testing and analysis procedures.

Null Hypotheses and Statistical Analysis

The research questions led to the following null hypotheses:

Research Question #1

Is the KFD a valid instrument for assessing structural concepts of family functioning of Hispanic American families according to Minuchin's Structural Family Theory?

Hypothesis 1

There is no significant multiple correlation between a linear combination of the KFD Family Hierarchy
variables and the Parent Coalition/Cross-Generational Triads variable of SFIS-R.

This hypothesis was tested by multiple linear regression analysis.

Hypothesis 2
There is no significant canonical correlation between a linear combination of the KFD Family Subsystems variables and the three SFIS-R variables Spouse Conflict Resolved/Unresolved, Mother-Child Cohesion/Estrangement, and Father-Child Cohesion/Estrangement.

This hypothesis was tested by canonical correlation analysis.

Hypothesis 3
There is no significant multiple correlation between a linear combination of the KFD Boundaries variables and SFIS-R Enmeshment/Disengagement scale.

This hypothesis was tested by multiple linear regression analysis.

Hypothesis 4
There is no significant multiple correlation between a linear combination of KFD Family Adaptability variables and the SFIS-R Flexibility/Rigidity scale.

This hypothesis was tested by multiple linear regression analysis.
Hypothesis 5

There is no significant multiple correlation between a linear combination of the KFD Family Boundaries variables and the FACES II Cohesion scale.

This hypothesis was tested by multiple linear regression analysis.

Hypothesis 6

There is no significant multiple correlation between a linear combination of the KFD Family Adaptability variables and the FACES II Adaptability scale.

This hypothesis was tested by multiple linear regression analysis.

Research Question #2

Are there differences in the perceptions of structural concepts of family functioning among Hispanic American families with substance-abusing or nonsubstance-abusing adolescents as revealed in their Kinetic Family Drawings and their scores on the Structural Family Interactions Scale-Revised (SFIS-R) and the Cohesion and Adaptability Scales of FACES II?

Hypothesis 7

There is no significant difference between the mean scores of clinic and non-clinic subjects on each of the separate SFIS-R variables.
Hypothesis 8

There is no significant difference between the mean scores of clinic and non-clinic subjects for each of the 37 KFD variables.

Hypothesis 9

There is no significant difference between the mean scores of clinic and non-clinic subjects for the FACES II Cohesion Adaptability variable.

Hypotheses 7 to 9 were tested by the $t$-test for the means of two independent samples.

Hypothesis 10

There is no linear combination of the KFD Family Hierarchy variables which significantly discriminates between clinic and non-clinic samples.

Hypothesis 11

There is no linear combination of the KFD Family Subsystems variables which significantly discriminates between clinic and non-clinic samples.

Hypothesis 12

There is no linear combination of the KFD Family Boundaries variables which significantly discriminates between clinic and non-clinic samples.

Hypothesis 13
Adaptation variables which significantly discriminates between clinic and non-clinic samples.

**Hypothesis 14**

There is no linear combination of the eight SFIS-R variables which significantly discriminates between clinic and non-clinic samples.

Hypotheses 10 to 14 were tested by discriminant analysis. All hypotheses were tested for various subsets of subjects, provided the number of subjects in a subset was great enough. Subsets used were: mothers, fathers, parents, sons, daughters, and children.

All these hypotheses were tested using .05 level of significance.

**Summary**

In this chapter the type of research as well as the description of the population and sample were outlined. The chapter also described the variables which were studied and the instruments used to collect the data. This chapter further described the data collection procedures, the null hypotheses, and methods of statistical analysis.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

This chapter presents the findings of the study. The first section examines the demographic data concerning the sample; the second section describes the basic data of the sample; the third presents the tests of the hypotheses; and the fourth section presents a qualitative discussion of the findings.

Sample Demographic Information

The sample for this study was comprised of 141 families, 74 with an adolescent with substance-abusing problems, and 67 with drug-free family members. Each group, the clinic and non-clinic, included 130 subjects with a total of 260 people involved in the study. Each subject completed one KFD and responded to the SFIS-R and FACES-II questionnaires. The subjects completed the research materials at their homes, counseling centers, and public school facilities. Table 5 shows the sample size for this study.

All subjects were Hispanic American. The subjects of both groups were living in Chicago,
TABLE 5
SAMPLE SIZE

<table>
<thead>
<tr>
<th></th>
<th>Families</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic sample</td>
<td>74</td>
<td>130</td>
</tr>
<tr>
<td>Non-clinic sample</td>
<td>67</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>260</td>
</tr>
</tbody>
</table>

and surrounding areas, and southern Michigan. The participants were not similarly distributed with respect to gender, age, education level, geographic location, parents' participation, ethnic background, and religion, because of the difficulties encountered in the sample-taking process as stated before.

Table 6 presents the number of parents living at home who participated in the study. Of the 28 fathers reported living at home in the clinic sample group, only 15 (53.6%) drew pictures and answered the questionnaires; of the 67 mothers at home, only 40 (56.9%) drew pictures and answered the study's questionnaires. In the non-clinic group of the 46 fathers reported at home, only 12 (26.1%) drew pictures and answered the questionnaires; of the 72 mothers at home, only 41 (56.9%) drew pictures and answered the questionnaires. Mothers participated more frequently than fathers in both the clinic and non-clinic groups.
TABLE 6

SAMPLE DISTRIBUTION BY PARENTS' PARTICIPATION

<table>
<thead>
<tr>
<th></th>
<th>Clinic Sample</th>
<th>Non-clinic Sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers at home</td>
<td>28</td>
<td>46</td>
<td>74</td>
</tr>
<tr>
<td>Fathers at home who drew pictures</td>
<td>15</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Mothers at home</td>
<td>67</td>
<td>72</td>
<td>139</td>
</tr>
<tr>
<td>Mothers at home who drew pictures</td>
<td>40</td>
<td>41</td>
<td>81</td>
</tr>
</tbody>
</table>

Age and Sex of the Sample Subjects

In the clinic group, subjects consisted of 59 (45.4%) males and 71 (54.6%) females with a total of 130 participants. Their ages ranged from 12 to 65 years. Mean age for fathers was 42.7 years with a range from 29 to 65 years; mean age for mothers was 41.2 years with a range from 30 to 59 years; mean age for sons was 16.6 years with a range from 13 to 20 years; mean age for daughters was 15.8 with a range from 13 to 20 years. Table 7 presents data concerning age and sex of both the clinic and non-clinic subjects.

In the non-clinic group, subjects consisted of 52 (40%) males and 78 (60%) females with a total of 130 participants. Their ages ranged from 12 to 53 years. Mean age for fathers was 40.9 with a range from 31 to 50 years; mean age for mothers was 39.4 years with a range

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<table>
<thead>
<tr>
<th>Clinic</th>
<th>Non-Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1 (6.7)</td>
<td>---</td>
</tr>
<tr>
<td>5 (33.3)</td>
<td>19 (47.5)</td>
</tr>
<tr>
<td>5 (33.3)</td>
<td>16 (40.0)</td>
</tr>
<tr>
<td>3 (20.0)</td>
<td>5 (12.5)</td>
</tr>
<tr>
<td>1 (6.7)</td>
<td>---</td>
</tr>
<tr>
<td>15(100)</td>
<td>40(100)</td>
</tr>
</tbody>
</table>

**Note.** Column percentage in parentheses.
from 28 to 53 years; mean age for sons was 14.7 years with a range from 12 to 20 years; mean age for daughters was 15.2 with a range from 12 to 20 years.

**Education Levels and Location of the Sample Subjects**

Table 8 presents data concerning the education level of the sample. Of the 260 subjects of the entire sample, 208 (80%) did not finish secondary school, 42 (16.2%) did finish secondary school, 8 (3.1%) attended college, and 2 (4.8%) attended vocational schools. The clinic and non-clinic parents appear to be similar in terms of education level.

Table 8 also presents the data on the location of the subjects. Of the 260 subjects, 74.2% lived in urban areas, 6.2% in suburban areas, and 19.6% in rural areas. The clinic and non-clinic families living in urban, suburban, and rural areas appear to be different. The clinic group has a higher number of subjects from urban areas than the non-clinic. The non-clinic group shows a higher number of subjects from suburban and rural areas.

**Ethnic Background and Religion of the Sample Subjects**

Table 9 presents the ethnic background of the participants. Most of the sample were of Mexican (58.5%) and Puerto Rican (38.8%) descent. The remainder of the group were from other Hispanic countries (2.7%). It was reported that 81% of the total sample were Roman
<table>
<thead>
<tr>
<th></th>
<th>Clinic</th>
<th></th>
<th>Non-clinic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Father</td>
<td>Mother</td>
<td>Son</td>
<td>Daughter</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Secondary</td>
<td>10 (66.7)</td>
<td>25 (62.5)</td>
<td>38 (86.4)</td>
<td>28 (90.3)</td>
</tr>
<tr>
<td>Finish Secondary</td>
<td>4 (26.7)</td>
<td>10 (25.0)</td>
<td>5 (11.4)</td>
<td>3 (9.7)</td>
</tr>
<tr>
<td>College</td>
<td>1 (6.7)</td>
<td>4 (10.0)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Vocational School</td>
<td>---</td>
<td>1 (2.5)</td>
<td>1 (2.3)</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>15(100)</td>
<td>40(100)</td>
<td>44(100)</td>
<td>31(100)</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>14 (93.3)</td>
<td>38 (95.0)</td>
<td>41 (93.2)</td>
<td>30 (96.8)</td>
</tr>
<tr>
<td>Suburban</td>
<td>1 (6.7)</td>
<td>2 (5.0)</td>
<td>2 (4.5)</td>
<td>1 (3.2)</td>
</tr>
<tr>
<td>Rural</td>
<td>---</td>
<td>---</td>
<td>1 (2.3)</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>15(100)</td>
<td>40(100)</td>
<td>44(100)</td>
<td>31(100)</td>
</tr>
</tbody>
</table>

Note. Column percentage in parentheses.
TABLE 9
SAMPLE DISTRIBUTION BY ETHNICITY

<table>
<thead>
<tr>
<th>Ethnic Background</th>
<th>Clinic</th>
<th>Non-clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>Mex. American</td>
<td>6(40.0)</td>
<td>17(42.5)</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>9(60.0)</td>
<td>21(52.5)</td>
</tr>
<tr>
<td>Others</td>
<td>---</td>
<td>2(5.0)</td>
</tr>
<tr>
<td>Total</td>
<td>15(11.5)</td>
<td>40(30.8)</td>
</tr>
</tbody>
</table>

Note. Column percentage in parentheses.
Catholic, 12% were from different evangelical denominations, and the rest (6.5%) did not report any church affiliation at all (see Table 10).

**Basic Data from Major Instruments**

**Structural Family Interaction Scale-Revised (SFIS-R)**

Table 11 presents the mean, standard deviation, possible range, and actual range of the rating on each scale of the SFIS-R for the eight concepts or scales of the instrument. The SFIS-R distribution of scales does not include the lower parts of the possible range for most of the scales. This narrower range of scores could have an effect on the hypothesis testing.

**Family Cohesion and Adaptability Scale (FACES III)**

Table 12 presents the mean, standard deviation, possible range, and actual range of the distribution of scores for this 30-item scale. The scores for each item range from 1 (almost never) to 5 (almost always). High scores for Cohesion are interpreted as "very connected," high scores for Adaptability are interpreted as "very flexible," and high scores for Family Type are interpreted as "balanced."

**Kinetic Family Drawing (KFD)**

The length variables of the measures of central value and variability are presented in Table 13. For
<table>
<thead>
<tr>
<th></th>
<th>Clinic</th>
<th></th>
<th>Non-clinic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Catholic</td>
<td>Evangelical</td>
<td>No Affiliation</td>
<td>Catholic</td>
</tr>
<tr>
<td>Mexican American</td>
<td>47 (36.2)</td>
<td>4 (3.1)</td>
<td>3 (2.3)</td>
<td>87 (66.9)</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>45 (34.6)</td>
<td>15 (11.5)</td>
<td>12 (9.2)</td>
<td>27 (20.8)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (1.5)</td>
<td>2 (1.5)</td>
<td>---</td>
<td>3 (2.3)</td>
</tr>
<tr>
<td>Total</td>
<td>94 (72.3)</td>
<td>21 (16.2)</td>
<td>15 (11.5)</td>
<td>117 (90.0)</td>
</tr>
</tbody>
</table>

**Note.** Column percentage in parentheses.
<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Possible Range</th>
<th>Actual Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment-Disengagement</td>
<td>58.085</td>
<td>5.023</td>
<td>68-17</td>
<td>68-41</td>
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<tr>
<td>Parent Coalition/Cross-Generational Triads</td>
<td>29.085</td>
<td>6.836</td>
<td>44-11</td>
<td>44-11</td>
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<tr>
<td>Father-Child Cohesion/Estrangement</td>
<td>29.231</td>
<td>5.423</td>
<td>38-10</td>
<td>38-17</td>
</tr>
<tr>
<td>Mother-Child Cohesion/Estrangement</td>
<td>28.200</td>
<td>4.063</td>
<td>36-9</td>
<td>36-19</td>
</tr>
<tr>
<td>Spouse Conflict Resolved/Unresolved</td>
<td>31.358</td>
<td>4.038</td>
<td>40-10</td>
<td>40-22</td>
</tr>
<tr>
<td>Flexibility/Rigidity</td>
<td>28.912</td>
<td>2.322</td>
<td>36-9</td>
<td>36-24</td>
</tr>
<tr>
<td>Family Conflict Avoidance/Expression</td>
<td>27.838</td>
<td>2.243</td>
<td>32-8</td>
<td>32-24</td>
</tr>
<tr>
<td>Overprotection/Autonomy</td>
<td>27.900</td>
<td>2.687</td>
<td>36-9</td>
<td>36-23</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Possible Range</td>
<td>Actual Range</td>
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<tr>
<td>------------------</td>
<td>-------</td>
<td>--------------------</td>
<td>----------------</td>
<td>--------------</td>
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<tr>
<td>Cohesion</td>
<td>56.600</td>
<td>12.090</td>
<td>80-6</td>
<td>80-16</td>
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<tr>
<td>Adaptation</td>
<td>45.360</td>
<td>8.230</td>
<td>70-4</td>
<td>66-24</td>
</tr>
<tr>
<td>Cohesion Level</td>
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<td>8-1</td>
<td>8-1</td>
</tr>
<tr>
<td>Adaptation Level</td>
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<td>1.806</td>
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<td>8-1</td>
</tr>
<tr>
<td>Family Type</td>
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<td>1.687</td>
<td>8-1</td>
<td>8-1</td>
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<td>Variable</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Range</td>
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</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>--------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Size of father</td>
<td>0.9379</td>
<td>1.0186</td>
<td>0-6.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.3236</td>
<td>0.8617</td>
<td>0-6.00</td>
<td></td>
</tr>
<tr>
<td>Size of mother</td>
<td>1.4897</td>
<td>0.9805</td>
<td>0-5.70</td>
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<tr>
<td></td>
<td>1.5141</td>
<td>0.9836</td>
<td>0-5.70</td>
<td></td>
</tr>
<tr>
<td>Size of child</td>
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<td>0-6.73</td>
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<tr>
<td>Vert disp father</td>
<td>9.4000</td>
<td>7.9551</td>
<td>0-27.00</td>
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<td></td>
<td>13.8540</td>
<td>5.3575</td>
<td>0-21.50</td>
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<td>Vert disp mother</td>
<td>13.2412</td>
<td>6.0043</td>
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<tr>
<td></td>
<td>13.3160</td>
<td>5.8715</td>
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<td>Vert disp child</td>
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<td>0.5431</td>
<td>0-3.35</td>
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</tr>
<tr>
<td>Dist father/mother</td>
<td>4.0927</td>
<td>6.3716</td>
<td>0-38.65</td>
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</tr>
<tr>
<td></td>
<td>6.7610</td>
<td>7.1705</td>
<td>0-38.65</td>
<td></td>
</tr>
<tr>
<td>Dist father/child</td>
<td>5.0505</td>
<td>8.3277</td>
<td>0-85.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.3517</td>
<td>10.0066</td>
<td>0-85.62</td>
<td></td>
</tr>
<tr>
<td>Dist mother/child</td>
<td>6.1199</td>
<td>8.9243</td>
<td>0-99.73</td>
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<tr>
<td></td>
<td>6.4047</td>
<td>9.1260</td>
<td>0-99.73</td>
<td></td>
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<tr>
<td>Central disp father</td>
<td>3.3111</td>
<td>8.6753</td>
<td>-5.5-22.50</td>
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<tr>
<td></td>
<td>7.7124</td>
<td>7.5965</td>
<td>-5.5-22.50</td>
<td></td>
</tr>
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<td>7.6665</td>
<td>7.7331</td>
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<td>Central disp child</td>
<td>8.3088</td>
<td>7.2418</td>
<td>-5.5-22.00</td>
<td></td>
</tr>
</tbody>
</table>

Note. For variables involving one or more parent figure(s), statistics are given for the whole sample; then, below, for those cases only for which the parent figure(s) is(are) present in the home.
those variables involving one or more parent figures, this table presents, first of all, data distribution regarding the whole sample; then, below, data for those cases only for which the parent figure(s) is(are) present in the family. The central displacement variables showed a range from negative to positive numbers because the figures' distances were calculated from the central vertical axis of the page. In the cases where the father, mother, or child were not included in the drawing, they were given a value of 0 in the scoring system. Rating categories and means for the other KFD variables are presented in Table 14.

**Testing the Hypotheses**

Fourteen hypotheses were tested. Multiple linear regression analysis was used for hypotheses 1, 3, 4, 5, and 6. The best subsets regression program was used for all regression analyses. The criterion used for ranking the subsets is Mallow's Cp index, which is a function of the squared residuals. Canonical correlation analysis was used for hypothesis 2. Hypotheses 7 to 9 were tested by the $t$-test for means of two independent samples. Hypotheses 10 to 14 were tested by discriminant analysis. All hypotheses were tested for various subsets of subjects, provided the number of subjects in a subset was great enough. Subsets used were: fathers, mothers, parents, sons, daughters, and children. All hypotheses
### TABLE 14

**DISTRIBUTION OF KFD "NON-LENGTH" VARIABLES**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rating Category</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Mean</th>
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<tbody>
<tr>
<td>Barr mother/father</td>
<td></td>
<td>165</td>
<td>18</td>
<td>4</td>
<td>34</td>
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<td>Barr father/child</td>
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<td>32</td>
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<td>--</td>
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<tr>
<td>Barr mother/child</td>
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<td>56</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>33</td>
<td>--</td>
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<td>Compart of figures</td>
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<td>6</td>
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<tr>
<td>Orit mother/father</td>
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<td>20</td>
<td>19</td>
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<td>--</td>
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<td>2.25769</td>
</tr>
<tr>
<td>Orit father/child</td>
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<td>96</td>
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<td>1.31153</td>
</tr>
</tbody>
</table>

**Note.** For variables involving one or more parent figure(s), statistics are given for the whole sample; then, below, for those cases only for which the parent figure(s) is(are) present in the home.
are presented in the null form and were tested using the .05 level of significance.

Hypothesis 1

Hypothesis 1 states that there is no significant multiple correlation between a linear combination of the KFD Family Hierarchy variables and the Parent Coalition/Cross-Generational Triads variable of SFIS-R.

Analysis

This hypothesis was tested separately for various subgroups. For all subsets, regression analysis was performed for mothers, parents, sons, daughters, and children.

Mothers

No subset was found which significantly related the KFD family hierarchy variables to the SFIS-R Parent Coalition/Cross Generational Triads variable. The best subset yielded a correlation of only .10361 with p = .3635.

Parents

No subset was found which significantly related the KFD Family Hierarchy variables to the SFIS-R Parent Coalition/Cross Generational Triads variable. The best subset yielded a correlation of only .01972 with p = .1571.
Sons

The best subset yielded a multiple correlation of \(0.39742 (\hat{\rho}^2 = 0.158)\) with \(F = 3.05\) and \(p = 0.0230\). This is therefore significant. However, of the four independent variables in this subset, only two had significant \(t\)-statistics. These were size of father figure and vertical displacement of the child. The regression analysis was, therefore, performed again using these two independent variables. In this analysis, size of the father figure is no longer significant. When the analysis was performed using only vertical displacement of child as the predictor, \(F = 5.53\), with \(p = 0.0216\). The correlation is \(0.27423 (\hat{\rho}^2 = 0.075)\). The null hypothesis was rejected.

Daughters

No subsets were found which significantly related the KFD Family Hierarchy variables to the SFIS-R Parent Coalition/Cross-Generational Triad variable. The best subset yielded a correlation of only \(0.21688\) with \(p = 0.0932\).

Children

The best subset yielded a multiple correlation of \(0.024252 (\hat{\rho}^2 = 0.05881)\) with \(F = 4.00\) and \(p = 0.0207\). This is therefore significant. However, of the two independent variables in this subset only one had a significant \(t\)-statistic. This was vertical displacement.
of the child. The regression analysis was again performed using only the vertical displacement of the child as the predictor. In this analysis, the vertical displacement of the child was again significant. The correlation is $0.19426$ ($\chi^2 = 0.3774$), with $F = 5.06$ and $p = .026$.

For mothers, parents, and daughters the null hypothesis 1 was retained. There is no significant relationship between the KFD Family Hierarchy and the Parent Coalition/Cross-Generational Triads. For sons and children, however, the null hypothesis was rejected. The regression analysis indicated a positive relationship with respect to the drawings of sons and children. The higher the sons and children placed themselves in the family drawing, the greater the coalition exists between the parents. The null hypothesis was rejected.

**Hypothesis 2**

Hypothesis 2 stated that there is no significant canonical correlation between a linear combination of the KFD Family Subsystems variables and the three SFIS-R variables Spouse Conflict Resolved/Unresolved, Mother-Child Cohesion/Estrangement, and Father-Child Cohesion/Estrangement. These are the three SFIS-R variables which are combined by Perosa (no weights given) to define family interactional patterns with inappropriate alignments across generations.
Analysis

This hypothesis was tested by canonical correlation analysis for the complete group of subjects and for various subsets. When tested for the complete group, the first function yielded a canonical correlation of .29377, with $p = .1129$, and this is not significant. Similar results were obtained for the subgroup mothers, parents, sons, and children.

For the subgroup daughters, however, a significant canonical correlation was obtained. This correlation was .63819, with $p = .0271$. Table 15 shows the loadings of the variable in two sets. In each set, the higher loadings are ranked. I used a common convention of first selecting, in each set, variables whose loadings were at least 50% of the maximum loading in that set. If a variable with weight slightly below 50% makes a logical contribution to the analysis, that may be included. However, if a variable whose weight is only a little over 50% does not appear to make a logical contribution, it is ignored. In this case, KFD Subsystems type of barriers between fathers and child is ignored.

The analysis is interpreted as follows: Greater father-child cohesion on the Perosa scales is related to displacement of mother figure farther to the right, less compartmentalization of figures, greater barriers between mother and father, and self displaced less far to the right of the picture. Thus, for daughters there is only
TABLE 15
CANONICAL VARIABLE LOADINGS
HYPOTHESIS 2—DAUGHTERS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Dist. bet. Father/Mother</td>
<td>0.168</td>
<td></td>
</tr>
<tr>
<td>2 Dist. Bet. Father/Child</td>
<td>0.156</td>
<td></td>
</tr>
<tr>
<td>3 Dist. Bet. Mother/Child</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>4 Central Disp. Father</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td>5 Central Disp. Mother</td>
<td>0.534</td>
<td>1</td>
</tr>
<tr>
<td>6 Central Disp. Child</td>
<td>-0.307</td>
<td>4</td>
</tr>
<tr>
<td>7 Barriers Bet. Mother/Father</td>
<td>0.415</td>
<td>3</td>
</tr>
<tr>
<td>8 Barriers Bet. Father/Child</td>
<td>0.279</td>
<td></td>
</tr>
<tr>
<td>9 Barriers Bet. Father/Child</td>
<td>-0.127</td>
<td></td>
</tr>
<tr>
<td>10 Compartmentalization</td>
<td>-0.526</td>
<td>2</td>
</tr>
<tr>
<td>11 Encaptualation</td>
<td>0.186</td>
<td></td>
</tr>
<tr>
<td><strong>Second Set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Father-Child Cohesion/Estrangement</td>
<td>0.703</td>
<td>1</td>
</tr>
<tr>
<td>4 Mother-Child Cohesion/Estrangement</td>
<td>-0.070</td>
<td></td>
</tr>
<tr>
<td>5 Spouse Conflict Resolve/Unresolved</td>
<td>0.307</td>
<td></td>
</tr>
</tbody>
</table>

A modest relationship between the KFD Family Subsystems variables and the three SFIS-R variables Spouse Conflict Resolved/Unresolved, Mother-Child Cohesion/Estrangement, and Father-Child Cohesion/Estrangement. For daughters the null hypothesis is rejected.

As the relationship between the two sets of variables was found for only one of the five subgroups, I concluded that only a modest relationship exists between these two sets. There is no perceptible relationship between the KFD Family Subsystems variables and Perosa's variables.
Hypothesis 3

Hypothesis 3 stated that there is no significant multiple correlation between a linear combination of the KFD Boundaries variables and SFIS-R Enmeshment/Disengagement scale.

This hypothesis was tested separately for various subgroups by multiple regression analysis for the complete group of subsets.

**Mothers**

A best subset was found which significantly related the KFD Boundaries to SFIS-R Enmeshment/Disengagement scale. The best subset yielded a correlation of .28431 ($r^2 = .08083$), with $F = 6.95$ and $p = .01101$. This is therefore significant. Cooperation mother was the only variable significantly contributing to the relationship. The interpretation is that the more cooperative self the mother draws, the more enmeshed is the family. For mothers, the null hypothesis was rejected.

**Parents**

The best subset included two independent variables, distance between father and child, and cooperation of child, both with positive coefficients. The multiple correlation was .28662 ($r^2 = .08215$), with $F = 4.70$ and $p = .0111$. This subset indicates that the greater the distance between father and child, and the
more cooperative the child, the more enmeshed the parents see the family.

The next 3 subsets of two variables each as ranked on Mallow's CP index were also significant, with correlations of .28662, .28122, and .27950 respectively.

The first indicates that the greater the distance between father and child, and the more cooperative the child, the more enmeshed the parents see the family.

The second of these indicated that the greater the distance between father and mother, and the more cooperative the child, the more enmeshed the parents see the family.

The third indicates that the greater the distance between mother and child, and the more cooperative the child, the more enmeshed the parents see the family. For parents, the null hypothesis was rejected.

Sons

No subset was found which significantly related the KFD Family Boundaries to the SFIS-R Enmeshment/Disengagement variables. The best subset yielded a correlation of only .17481 with \( p = .1140 \).

Daughters

The best subset yielded a multiple correlation of .3689 including three variables, but only one of those three has a significant t-test. This was the distance between the mother and child. A new regression was
undertaken using this one independent variable. The distance between the mother and the child was significant with a multiple correlation of .24124 ($r^2 = .05819$), with $F = 4.08$, and $p = .0475$. The coefficient was positive indicating that the greater the distance between the mother and the daughter in the drawings the more enmeshed the daughter sees the family. For daughters, the null hypothesis was rejected.

Children

The best subset yielded a multiple correlation of .17911 ($r^2 = .03208$), with $F = 4.94$ and $p = .0278$. This is therefore significant. Only one variable, cooperation of mothers, was included in this subset. Hence with respect to the drawings of the children, there is a positive relationship. The greater cooperation of mother shown in the children's drawings, the more enmeshed they considered the family. For children, the null hypothesis was rejected.

Of the five subgroups tested, the mothers, parents, daughters, and children showed a significant relationship between the two sets of variables. Thus, the null hypothesis was rejected for mothers, parents, daughters, and children.

Hypothesis 4

Hypothesis 4 states that there is no significant multiple correlation between a linear combination of KFD
Family Adaptability variables and the SFIS-R Flexibility/Rigidity scale.

This hypothesis was tested separately for various subgroups using regression analysis.

Mothers

No subset was found which significantly related the KFD Family Adaptability variables to the SFIS-R Flexibility/Rigidity scale. The best subset yielded a correlation of .14334, with $p = .2017$.

Parents

The best subset yielded a multiple correlation of $.20387$ ($r^2 = .04156$), with $F = 4.60$ and $p = .0343$. This is significant. Only one variable was significant. This was the number of human figures. The regression coefficient is positive. Hence, with respect to the drawings of the parents, there is a positive relationship. The more human figures they showed in their drawings, the more flexible they considered the family. Thus, the null hypothesis was rejected.

Sons

The best subset yielded a multiple correlation of $.22708$ ($r^2 = .05157$), with $F = 4.46$ and $p = .038$. This is significant. The regression coefficient is positive. Activity level of father was the one significant variable. Thus the greater activity of father shown in the
sons' drawings, the more flexible they saw the family. For sons, the hypothesis was rejected.

**Daughters**

No subset was found which significantly related the KFD Family Adaptability variables to the Flexibility/Rigidity scale. The best subset yielded a correlation of 0.013698 with $p = 0.2653$.

**Children**

No subset was found which significantly related the KFD Family Adaptability variables to the Flexibility/Rigidity scale. The best subset yielded a correlation of 0.10550 with $p = 0.1958$.

Of the five subgroups tested, the parents' number of human figures shown in their drawings, and sons' greater activity of father shown in their drawings were significant. For these subgroups the null hypotheses were rejected.

**Hypothesis 5**

Hypothesis 5 states that there is no significant multiple correlation between a linear combination of the KFD Family Boundaries variables and the FACES II Cohesion scale.

This hypothesis was tested separately for various subgroups using regression analysis.
Mothers

The best subset yielded a multiple correlation of .48359 ($r^2 = .23386$), with $F = 10.504519$ and $p = .0011$. This is therefore significant. However, of the five independent variables in this subset, only two had significant $t$-statistics. These were nurturing father and cooperation mother. The regression analysis was performed again using these two independent variables. In this analysis, nurturing father is no longer significant. One subset of two variables including cooperation mother was ranked high on Mallow's Cp index, and had both coefficients significant. The second variable was generational boundaries. The regression is significant with $F = 7.95$ and $p = .0007$. The correlation is .41140 ($r^2 = .16925$). Both regression coefficients are positive. Thus the mothers who see the family as more cohesive show in their drawings more appropriate (clear) generational boundaries and a more cooperative mother. The null hypothesis was rejected.

Parents

The best subset yielded a multiple correlation of .39683 ($r^2 = .15748$), with $F = 6.48$ and $p = .0005$. However, of the three independent variables, only two had significant $t$-statistics. These were orientation mother and father and cooperation child. The regression analysis was run again using these two independent
variables. In this analysis orientation of the mother and father and cooperation child were significant predictors, with $F = 7.81$, and $p = .0007$. The correlation is $0.35988$ ($r^2 = 0.012952$). All regression coefficients were positive. Thus parents who view the family as more cohesive draw pictures showing mother and father turned more toward each other and a more cooperative child. The null hypothesis was rejected.

Sons

No subset was found which significantly related the KFD Family Boundaries variables and the FACES II Cohesion scale. The best subset yielded a correlation of only $0.19449$, with $p = .0763$.

Daughters

The best subset yielded a multiple correlation of $0.38254$ ($r^2 = 0.14633$), with $F = 5.57$ and $p = .0058$. The two significant variables, both with positive coefficients, were nurturing mothers and cooperative father. Thus the daughters who see the family as more cohesive draw pictures showing a more nurturing mother and a more cooperative father. The null hypothesis was rejected.

Children

The best subset yielded a multiple correlation of $0.27061$ ($r^2 = 0.07323$), with $F = 5.89$ and $p = .0035$. This is therefore significant. There were two significant
predictors, orientation mother and father and cooperation mother, both with positive coefficients. Thus the children who see the family as more cohesive draw pictures showing mother and father more facing each other and more cooperative mother.

Hypothesis 6

Hypothesis 6 stated that there is no significant correlation between a linear combination of the KFD Family Adaptability variables and the FACES II Adaptability scale. This hypothesis was tested separately for various subgroups using regression analysis.

Mothers

The best subset yielded a multiple correlation of .47053 ($r^2 = .22139$), with $F = 7.30$ and $p = .0002$. This is significant. However, of the three independent variables in this subset, only two had significant $t$-statistics. These were sexual characteristics and activity level of the child. The regression analysis was run again using these two independent variables. In this analysis, sexual characteristics and activity level of the child were significant, with $F = 9.32$ and $p = .0002$. The correlation is .43913 ($r^2 = .19284$). The regression coefficient is negative for sexual characteristics and positive for activity level of child. Thus, the mothers who see the family as more adaptable draw pictures showing less sexual characteristics and greater activity.
level of child. The null hypothesis was rejected.

Parents

No subset was found which significantly related the KFD Family Adaptability variables and the FACES II Adaptability scale. The best subset yielded a correlation of only .23111, with a $p = .0560$.

Sons

The best subset yielded a multiple correlation of .38888 ($r^2 = .15123$) with $F = 14.61$ and $p = .0003$. This is significant. The one independent variable in this subset was the general impression of the family satisfaction like-to-live-in family. Thus the sons who saw their families as more adaptable drew pictures of families more attractive to live in. The null hypothesis was rejected.

Daughters

The best subset yielded a multiple correlation of .41872 ($r^2 = .17533$), with $F = 6.91$ and $p = .0019$. This is therefore significant. The two independent variables in this subset, both significant, were the activity level of the father and general impression of the family satisfaction. Both had positive coefficients. Hence those daughters who view their family as more adaptable draw pictures showing greater activity level of father and a family more attractive to live in. The null hypothesis was rejected.
Children

The best subset yielded a multiple correlation of 0.37609 ($r^2 = 0.14144$), with $F = 12.27$ and $p = 0.0000$. This is significant. The two independent variables in this subset which were significant were activity level of the father and general impression of family functioning. The interpretation for children is identical to that for daughters.

Hypothesis 7

Hypothesis 7 stated that there is no significant difference between the mean scores of clinic and non-clinic subjects on each of the separate SFIS-R variables.

This hypothesis was tested by the $t$-test for means of two independent samples. It was tested for the various subgroups of subjects.

Fathers

Table 16 shows the mean and the results of the $t$-tests on each of the eight SFIS-R variables.

The $t$-test is significant for only the first two of the eight variables. The non-clinic fathers scored significantly higher than the clinic fathers on the enmeshment variable and the parent coalition variable. On the other variables there is no significant difference between the means of clinic and non-clinic fathers, although in every case the non-clinic is somewhat higher than the clinic mean. This means that non-clinic fathers
TABLE 16

_t_-TESTS--FATHERS--SFIS-R VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Mean</th>
<th>Non-Clinic Mean</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment</td>
<td>58.0667</td>
<td>63.000</td>
<td>-2.41</td>
<td>.0235*</td>
</tr>
<tr>
<td>Parent coalition</td>
<td>26.000</td>
<td>32.4167</td>
<td>-2.72</td>
<td>.0118*</td>
</tr>
<tr>
<td>Father-child cohesion</td>
<td>28.733</td>
<td>32.500</td>
<td>-1.82</td>
<td>.0812</td>
</tr>
<tr>
<td>Mother-child cohesion</td>
<td>27.666</td>
<td>29.833</td>
<td>-1.32</td>
<td>.1997</td>
</tr>
<tr>
<td>Spouse conflict</td>
<td>32.266</td>
<td>33.416</td>
<td>-0.69</td>
<td>.4979</td>
</tr>
<tr>
<td>Flexibility</td>
<td>28.666</td>
<td>29.666</td>
<td>-1.17</td>
<td>.2535</td>
</tr>
<tr>
<td>Family conflict avoidance</td>
<td>27.666</td>
<td>28.833</td>
<td>-1.26</td>
<td>.2195</td>
</tr>
<tr>
<td>Overprotection</td>
<td>27.266</td>
<td>28.500</td>
<td>-0.88</td>
<td>.3894</td>
</tr>
</tbody>
</table>

*p < .05.

rate the family as more Enmeshed and better Parent Coalition than clinic fathers.

Mothers

Table 17 shows the mean and the results of the _t_-tests on each of the eight SFIS-R variables.

The _t_-test is significant for only the first of the eight variables. The non-clinic mothers score significantly higher than the clinic mothers on the enmeshment variable. On the other variables there is no significant difference between the means of clinic and non-clinic mothers, although the non-clinic mean is somewhat higher than the clinic mean on each variable with the exception of flexibility, which is lower. This means the non-clinic mothers rate the family as more enmeshed than the clinic mothers.
### TABLE 17

**t-TESTS—MOTHERS—SFIS-R VARIABLES**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Mean</th>
<th>Non-Clinic Mean</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment</td>
<td>58.0250</td>
<td>60.6341</td>
<td>-2.12</td>
<td>.0479*</td>
</tr>
<tr>
<td>Parent-coalition</td>
<td>27.8000</td>
<td>28.9512</td>
<td>-0.65</td>
<td>.5174</td>
</tr>
<tr>
<td>Father-child cohesion</td>
<td>27.3000</td>
<td>29.2195</td>
<td>-1.45</td>
<td>.1522</td>
</tr>
<tr>
<td>Mother-child cohesion</td>
<td>27.8250</td>
<td>28.9024</td>
<td>-1.08</td>
<td>.2821</td>
</tr>
<tr>
<td>Spouse conflict</td>
<td>31.2250</td>
<td>31.5610</td>
<td>-0.34</td>
<td>.7381</td>
</tr>
<tr>
<td>Flexibility</td>
<td>29.6250</td>
<td>29.3659</td>
<td>0.52</td>
<td>.6079</td>
</tr>
<tr>
<td>Family conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avoidance</td>
<td>28.0250</td>
<td>28.6098</td>
<td>-1.17</td>
<td>.2462</td>
</tr>
<tr>
<td>Overprotection</td>
<td>28.0500</td>
<td>28.2683</td>
<td>-0.37</td>
<td>.7092</td>
</tr>
</tbody>
</table>

*p < .05.

**Parents**

Table 18 shows the mean and the results of the t-tests on each of the eight SFIS-R variables.

### TABLE 18

**t-TESTS—PARENTS—SFIS-R VARIABLES**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Mean</th>
<th>Non-Clinic Mean</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment</td>
<td>58.0364</td>
<td>61.1698</td>
<td>-2.98</td>
<td>.0036*</td>
</tr>
<tr>
<td>Parent-coalition</td>
<td>27.3091</td>
<td>29.7359</td>
<td>-1.66</td>
<td>.0991</td>
</tr>
<tr>
<td>Father-child cohesion</td>
<td>27.6909</td>
<td>29.9623</td>
<td>-2.01</td>
<td>.0471*</td>
</tr>
<tr>
<td>Mother-child cohesion</td>
<td>27.7818</td>
<td>29.1132</td>
<td>-1.58</td>
<td>.1181</td>
</tr>
<tr>
<td>Spouse conflict</td>
<td>31.5091</td>
<td>31.9811</td>
<td>-0.55</td>
<td>.5840</td>
</tr>
<tr>
<td>Flexibility-rig</td>
<td>29.3636</td>
<td>29.4340</td>
<td>-0.16</td>
<td>.8714</td>
</tr>
<tr>
<td>Family conf-avoidance</td>
<td>27.9273</td>
<td>28.6604</td>
<td>-1.68</td>
<td>.0961</td>
</tr>
<tr>
<td>Overprotection</td>
<td>27.8364</td>
<td>28.3208</td>
<td>-0.87</td>
<td>.3847</td>
</tr>
</tbody>
</table>

*p < .05.
Only two of the eight variables show a significant t-test. The non-clinic parents score significantly higher than the clinic parents in enmeshment variable and father-child cohesion variable. On the other variables there is no significant difference between the means of clinic and non-clinic parents. These parents see the non-clinic families with a greater enmeshment and father-child cohesion than the clinic families.

**Sons**

Table 19 shows the means and the results of the t-tests on each of the eight SFIS-R variables.

Of the eight variables for sons, none has a significant t value. There is no significant difference between the means of clinic and non-clinic fathers, although the non-clinic mean is somewhat higher than the clinic mean on all variables.

**TABLE 19**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment</td>
<td>56.6591</td>
<td>57.3000</td>
<td>-0.74</td>
<td>0.4589</td>
</tr>
<tr>
<td>Parent-coalition</td>
<td>29.0455</td>
<td>30.3500</td>
<td>-1.00</td>
<td>0.3180</td>
</tr>
<tr>
<td>Father-child cohesion</td>
<td>29.3864</td>
<td>30.3000</td>
<td>-0.84</td>
<td>0.4038</td>
</tr>
<tr>
<td>Mother-child cohesion</td>
<td>28.0000</td>
<td>28.2000</td>
<td>-0.25</td>
<td>0.8060</td>
</tr>
<tr>
<td>Spouse conflict</td>
<td>30.3864</td>
<td>31.8000</td>
<td>-1.72</td>
<td>0.0884</td>
</tr>
<tr>
<td>Flexibility</td>
<td>28.0682</td>
<td>29.0750</td>
<td>-1.97</td>
<td>0.0524</td>
</tr>
<tr>
<td>Family conflict avoidance</td>
<td>27.1364</td>
<td>27.3250</td>
<td>-0.39</td>
<td>0.6968</td>
</tr>
<tr>
<td>Overprotection</td>
<td>27.2500</td>
<td>28.0250</td>
<td>-1.43</td>
<td>0.1559</td>
</tr>
</tbody>
</table>
Daughters

Table 20 shows the means and the results of the t-tests on each of the eight SFIS-R variables.

Only four of the eight variables show a significant t-test. The non-clinic daughters are significantly higher than the clinic daughters on Parent Coalition, Father-Child Cohesion, Mother-Child Cohesion, and Spouse Conflict Resolved. On the other variables there is no significant difference between the means of clinic and non-clinic daughters, although the non-clinic means is somewhat higher than the clinic on most variables. These daughters see the non-clinic families with a greater Parental Coalition, Father-Child and Mother-Child Cohesion, and Spouse Conflict Resolved than the clinic families.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enmeshment</td>
<td>56.3226</td>
<td>57.7568</td>
<td>-1.29</td>
<td>.2002</td>
</tr>
<tr>
<td>Parent coalition</td>
<td>27.1613</td>
<td>31.0811</td>
<td>-2.57</td>
<td>.0126*</td>
</tr>
<tr>
<td>Father-child cohesion</td>
<td>26.8710</td>
<td>31.1081</td>
<td>-3.76</td>
<td>.0004*</td>
</tr>
<tr>
<td>Mother-child cohesion</td>
<td>26.8065</td>
<td>28.9189</td>
<td>-2.27</td>
<td>.0266*</td>
</tr>
<tr>
<td>Spouse conflict</td>
<td>29.9677</td>
<td>32.0811</td>
<td>-2.48</td>
<td>.0155*</td>
</tr>
<tr>
<td>Resolved flexibility</td>
<td>28.6129</td>
<td>28.5675</td>
<td>0.08</td>
<td>.9353</td>
</tr>
<tr>
<td>Family conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avoidance</td>
<td>28.0645</td>
<td>27.7297</td>
<td>-0.66</td>
<td>.5121</td>
</tr>
<tr>
<td>Overprotection</td>
<td>27.5484</td>
<td>28.3243</td>
<td>-1.23</td>
<td>.2245</td>
</tr>
</tbody>
</table>

*p < .05.
Children

Table 21 shows the mean and the results of the $t$-tests on each of the eight SFIS-variables.

Only three of the eight variables show a significant $t$-test. The non-clinic children score higher than the clinic children in Parent-coalition variable, Father-Child Cohesion variable, and Spouse Conflict variable. On the other variables there is no significant differences between the mean of clinic and non-clinic children, although in every case the non-clinic is somewhat higher than the clinic mean. These children see the non-clinic families with a greater Parental Coalition, Father-Child Cohesion, and Spouse Conflict Resolved than the clinic families.

TABLE 21
$t$-TESTS—CHILDREN—SFIS-R VARIABLES

<table>
<thead>
<tr>
<th>Variables</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
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*p $< .05.$
Hypothesis 8 stated that there is no significant difference between the mean scores for clinic and non-clinic subjects for each of the 37 KFD variables.

This hypothesis was tested by the $t$-test for means of two independent samples. It was tested for the various subgroups of subjects.

**Fathers**

Table 22 shows the mean and the results of the $t$-test on each of the 37 KFD variables.

Only 1 of the 37 variables shows a significant $t$-test. The non-clinic fathers included significantly more Human Figures in the drawings than the clinic fathers. On the other variables there is no significant difference between the means of clinic and non-clinic fathers. Thus, the non-clinic fathers place more figures on the family drawings than the clinic fathers. With an $\alpha$ of .05 one significant variable out of 37 is less than could be expected by chance. Thus rejection of the hypothesis for fathers is tentative.

**Mothers**

Table 23 shows the mean and the results of the $t$-test on each of the 37 KFD variables.

For 6 of the 37 KFD variables the $t$ is significant. The non-clinic mothers scored significantly higher than the clinic mothers on the Vertical...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
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<th>p</th>
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*p < .05.*
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</table>

*P < .05.
Displacement of Fathers, Generational Boundaries, Cooperation Mother, Activity Level of the Father, Activity Level of the Mother, and Activity Level of the Child. Thus the non-clinic mothers showed a more appropriate distinction among Generational Boundaries and also showed themselves to be more cooperative than the clinic mothers. In addition, the non-clinic group showed greater Activity Level of the Father, the Mother, and the Child than the clinic group.

Sons

Table 24 shows the means and the results of the \( t \)-test on each of the 37 KFD variables.

For only 1 of the 37 KFD variables is the \( t \) significant. The clinic sons scored significantly higher than the non-clinic sons on the Nurturing Child. With an \( \alpha = .05 \) one significant variable out of 37 is less than could be expected by chance. Thus rejection for sons will be very tentative. On the other variables there is no significant difference between the means of clinic and non-clinic sons. Thus, the clinic sons see themselves as more nurturing than the non-clinic sons.

Daughters

Table 25 shows the means and the results of the \( t \)-test on each of the 37 KFD variables.

Only 9 of 37 KFD variables show significant \( t \)-tests. The clinic daughters scored significantly higher
TABLE 24

T-TESTS—SONS—KFD VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
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<td>Nurturing father</td>
<td>0.1591</td>
<td>0.0000</td>
<td>0.75</td>
<td>0.4574</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>1.8182</td>
<td>1.9500</td>
<td>-0.29</td>
<td>0.7692</td>
</tr>
</tbody>
</table>
| Nurturing child              | 0.7727       | 0.1000           | 2.47 | 0.0155*
| Cooperation father           | 0.1818       | 0.3750           | -1.34| 0.1852|
| Cooperation mother           | 0.8409       | 1.1750           | -1.50| 0.1384|
| Cooperation child            | 0.4545       | 0.2500           | 0.16 | 0.8839|
| Sexual different             | 1.0455       | 1.3500           | -0.50| 0.6145|
| Act level father             | 1.2727       | 2.0250           | -1.14| 0.2627|
| Act level mother             | 3.0000       | 3.4250           | -0.57| 0.5706|
| Act level child              | 2.9545       | 3.3250           | -0.82| 0.4119|
| Gen impre family             | 2.9773       | 3.3500           | -1.41| 0.1624|
| # human figures              | 4.5455       | 4.4750           | 0.20 | 0.8426|

*p < .05.
## TABLE 25
### t-TESTS—DAUGHTERS—KFD VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of father fig</td>
<td>0.6900</td>
<td>0.7315</td>
<td>-0.22</td>
<td>.8302</td>
</tr>
<tr>
<td>Size of mother fig</td>
<td>1.4325</td>
<td>1.1435</td>
<td>2.27</td>
<td>.0262*</td>
</tr>
<tr>
<td>Size of child fig</td>
<td>1.7422</td>
<td>1.1022</td>
<td>3.19</td>
<td>.0021*</td>
</tr>
<tr>
<td>Vert disp father</td>
<td>7.9387</td>
<td>10.4324</td>
<td>-1.28</td>
<td>.2080</td>
</tr>
<tr>
<td>Vert disp mother</td>
<td>12.2968</td>
<td>13.0649</td>
<td>-0.50</td>
<td>.6210</td>
</tr>
<tr>
<td>Vert disp child</td>
<td>0.7653</td>
<td>0.8387</td>
<td>-0.64</td>
<td>.5224</td>
</tr>
<tr>
<td>Dist between mother/father</td>
<td>3.9018</td>
<td>6.6452</td>
<td>-1.55</td>
<td>.1263</td>
</tr>
<tr>
<td>Dist between father/child</td>
<td>3.9789</td>
<td>6.3973</td>
<td>-1.33</td>
<td>.1897</td>
</tr>
<tr>
<td>Dist between mother/child</td>
<td>4.6638</td>
<td>8.5044</td>
<td>-2.44</td>
<td>.0175*</td>
</tr>
<tr>
<td>Central disp father</td>
<td>0.0935</td>
<td>3.1892</td>
<td>-1.60</td>
<td>.1145</td>
</tr>
<tr>
<td>Central disp mother</td>
<td>6.8194</td>
<td>9.7622</td>
<td>-1.45</td>
<td>.1511</td>
</tr>
<tr>
<td>Central disp child</td>
<td>7.2935</td>
<td>7.6297</td>
<td>-0.20</td>
<td>.8421</td>
</tr>
<tr>
<td>Typ barriers between mother/father</td>
<td>1.0645</td>
<td>1.3784</td>
<td>-0.77</td>
<td>.4436</td>
</tr>
<tr>
<td>Typ barriers between father/child</td>
<td>1.1290</td>
<td>1.4324</td>
<td>-0.73</td>
<td>.4660</td>
</tr>
<tr>
<td>Typ barriers between mother/child</td>
<td>1.8065</td>
<td>1.8378</td>
<td>-0.07</td>
<td>.9418</td>
</tr>
<tr>
<td>Compartmental</td>
<td>0.3548</td>
<td>0.2703</td>
<td>0.74</td>
<td>.4597</td>
</tr>
<tr>
<td>Encapsulation</td>
<td>0.3226</td>
<td>0.2703</td>
<td>0.47</td>
<td>.6433</td>
</tr>
<tr>
<td>Differentiation</td>
<td>4.2903</td>
<td>4.9459</td>
<td>-1.62</td>
<td>.1099</td>
</tr>
<tr>
<td>Individual features</td>
<td>1.0968</td>
<td>1.3243</td>
<td>-1.22</td>
<td>.2273</td>
</tr>
<tr>
<td>Different positions</td>
<td>2.0645</td>
<td>2.3243</td>
<td>-1.02</td>
<td>.3106</td>
</tr>
<tr>
<td>Generational bound</td>
<td>0.4194</td>
<td>0.5405</td>
<td>-0.99</td>
<td>.3266</td>
</tr>
<tr>
<td>Gender differences</td>
<td>0.7097</td>
<td>0.7568</td>
<td>-0.43</td>
<td>.6669</td>
</tr>
<tr>
<td>Orient mother/father</td>
<td>1.7742</td>
<td>2.4595</td>
<td>-1.44</td>
<td>.1534</td>
</tr>
<tr>
<td>Orient father/child</td>
<td>1.8065</td>
<td>2.8378</td>
<td>-2.19</td>
<td>.1485</td>
</tr>
<tr>
<td>Orient mother/child</td>
<td>2.9677</td>
<td>3.5676</td>
<td>-1.62</td>
<td>.1093</td>
</tr>
<tr>
<td>Nurturing father</td>
<td>0.3548</td>
<td>0.4054</td>
<td>-0.16</td>
<td>.8727</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>1.3548</td>
<td>2.2703</td>
<td>-1.91</td>
<td>.0608</td>
</tr>
<tr>
<td>Nurturing child</td>
<td>0.4839</td>
<td>0.2162</td>
<td>-1.24</td>
<td>.2200</td>
</tr>
<tr>
<td>Cooperation father</td>
<td>0.0968</td>
<td>0.6218</td>
<td>-2.86</td>
<td>.0056*</td>
</tr>
<tr>
<td>Cooperation mother</td>
<td>0.6774</td>
<td>1.5405</td>
<td>-2.94</td>
<td>.0045*</td>
</tr>
<tr>
<td>Cooperation child</td>
<td>0.4839</td>
<td>0.6486</td>
<td>-0.64</td>
<td>.5254</td>
</tr>
<tr>
<td>Sexual different</td>
<td>1.1613</td>
<td>1.1622</td>
<td>-0.51</td>
<td>.9966</td>
</tr>
<tr>
<td>Act level father</td>
<td>0.9355</td>
<td>2.5676</td>
<td>-3.09</td>
<td>.0029*</td>
</tr>
<tr>
<td>Act level mother</td>
<td>2.5484</td>
<td>3.8378</td>
<td>-2.66</td>
<td>.0097*</td>
</tr>
<tr>
<td>Act level child</td>
<td>2.3226</td>
<td>3.2432</td>
<td>-1.94</td>
<td>.0571</td>
</tr>
<tr>
<td>Gen impre family</td>
<td>2.5484</td>
<td>3.3243</td>
<td>-2.49</td>
<td>.0152*</td>
</tr>
<tr>
<td># human figures</td>
<td>4.2903</td>
<td>5.3514</td>
<td>-3.49</td>
<td>.0009*</td>
</tr>
</tbody>
</table>

*p < .05.
than the non-clinic on Size of the Mother and Size of the Child. The non-clinic scored higher than the clinic on Distance Between Mother and Child, Cooperation Father and Mother, Activity Level of the Father, Activity Level of the Mother, general impression of Family Satisfaction, and Number of Human Figures. Thus, clinic daughters tended to draw larger mothers and children than non-clinic daughters. Non-clinic daughters are more inclined to see themselves more distant from their mothers than clinic daughters. Non-clinic daughters showed greater cooperation of the father and mother than clinic daughters. Non-clinic daughters showed greater Activity Level of the Father than the clinic daughters. The non-clinic daughters considered the family a better place to live. And, finally, the non-clinic daughters tended to place more figures on the picture than clinical daughters.

Hypothesis 9

Hypothesis 9 stated that there is significant difference between the mean scores of clinic and non-clinic subjects for the FACES II Cohesion and Adaptability variables.

This hypothesis was tested by the \( t \)-test for means of two independent samples. It was tested for the various subgroups of subjects.

Table 26 shows the means and the \( t \)-test results for each of the subgroups.
**TABLE 26**

**t-TESTS FACES II VARIABLES**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Clinic Means</th>
<th>Non-Clinic Means</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion fathers</td>
<td>59.2667</td>
<td>68.1667</td>
<td>-2.04</td>
<td>.0521</td>
</tr>
<tr>
<td>Cohesion mothers</td>
<td>55.6000</td>
<td>61.0000</td>
<td>-2.14</td>
<td>.0357*</td>
</tr>
<tr>
<td>Cohesion sons</td>
<td>52.7500</td>
<td>57.2250</td>
<td>-1.88</td>
<td>.0637</td>
</tr>
<tr>
<td>Cohesion daughters</td>
<td>49.6452</td>
<td>57.7027</td>
<td>-2.69</td>
<td>.0091*</td>
</tr>
<tr>
<td>Cohe level fathers</td>
<td>4.6000</td>
<td>6.3333</td>
<td>-2.13</td>
<td>.0431*</td>
</tr>
<tr>
<td>Cohe level mothers</td>
<td>3.9750</td>
<td>4.8537</td>
<td>-2.09</td>
<td>.0396*</td>
</tr>
<tr>
<td>Cohe level sons</td>
<td>3.5000</td>
<td>4.2000</td>
<td>-1.88</td>
<td>.0632</td>
</tr>
<tr>
<td>Cohe level daughters</td>
<td>3.1936</td>
<td>4.2432</td>
<td>-2.23</td>
<td>.0288*</td>
</tr>
<tr>
<td>Adapta fathers</td>
<td>50.0667</td>
<td>49.5833</td>
<td>0.19</td>
<td>.8508</td>
</tr>
<tr>
<td>Adapta mothers</td>
<td>45.4000</td>
<td>47.0000</td>
<td>-0.92</td>
<td>.3614</td>
</tr>
<tr>
<td>Adapta sons</td>
<td>43.2045</td>
<td>44.5750</td>
<td>-0.82</td>
<td>.4144</td>
</tr>
<tr>
<td>Adapta daughters</td>
<td>42.3548</td>
<td>46.1892</td>
<td>-1.70</td>
<td>.0931</td>
</tr>
<tr>
<td>Adap level fathers</td>
<td>5.4000</td>
<td>5.1667</td>
<td>0.40</td>
<td>.6940</td>
</tr>
<tr>
<td>Adap level mothers</td>
<td>4.2500</td>
<td>4.7073</td>
<td>-1.15</td>
<td>.2546</td>
</tr>
<tr>
<td>Adap level sons</td>
<td>3.8864</td>
<td>4.1750</td>
<td>-0.76</td>
<td>.4498</td>
</tr>
<tr>
<td>Adap level daughters</td>
<td>3.9355</td>
<td>4.4865</td>
<td>-1.19</td>
<td>.2387</td>
</tr>
<tr>
<td>Family type fathers</td>
<td>4.9333</td>
<td>5.7500</td>
<td>-1.31</td>
<td>.4394</td>
</tr>
<tr>
<td>Family type mothers</td>
<td>4.1000</td>
<td>4.7561</td>
<td>-1.81</td>
<td>.0738</td>
</tr>
<tr>
<td>Family type sons</td>
<td>3.7841</td>
<td>4.2000</td>
<td>-1.23</td>
<td>.2218</td>
</tr>
<tr>
<td>Family type daughters</td>
<td>3.5645</td>
<td>4.3649</td>
<td>-1.90</td>
<td>.0616</td>
</tr>
</tbody>
</table>

*p < .05.

**Fathers**

Only the Cohesion Level variable shows a significant t-test. The non-clinic fathers scored significantly higher than the clinic in the Cohesion Level. Thus, non-clinic fathers placed the family at a higher cohesion level than the clinic fathers.

On the Adaptability variable neither of the variables is significant. There is no difference between the clinic and non-clinic fathers.
Mothers

Only on the Cohesion variable do both the raw score and the level show a significant t-test. The non-clinic mothers scored significantly higher than the clinic in the Cohesion variable. Thus, non-clinic mothers showed more cohesion in the family than the clinic mothers and also showed a higher cohesion level.

On the Adaptability variables, neither of the variables is significant. Like fathers, there is no difference between the clinic and non-clinic mothers.

Sons

None of the two variables for Cohesion and Adaptability are significant. There is no difference between clinic and non-clinic for sons.

Daughters

For daughters only the Cohesion variable shows a significant t-test. The non-clinic daughters scored on both the raw score and the level significantly higher than the clinic daughters. Thus, daughters rate higher in Cohesion than clinic daughters.

On Adaptability, the results were the same as on fathers, mothers, and sons. t is not significant for clinic and non-clinic daughters.
Hypothesis 10

Hypothesis 10 stated that there is no linear combination of the KFD Family Hierarchy variables which significantly discriminates between the clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 df for the test of the resulting Chi-square. Table 27 shows the results.

There is a significant discrimination between clinic and non-clinic families only for parents and children.

TABLE 27
DISCRIMINANT ANALYSIS—HYPOTHESIS 10

<table>
<thead>
<tr>
<th>Group</th>
<th>Chi-square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>11.257</td>
<td>.0807</td>
</tr>
<tr>
<td>Parents</td>
<td>16.597</td>
<td>.0109*</td>
</tr>
<tr>
<td>Sons</td>
<td>11.119</td>
<td>.0848</td>
</tr>
<tr>
<td>Daughters</td>
<td>10.963</td>
<td>.0895</td>
</tr>
<tr>
<td>Children</td>
<td>14.097</td>
<td>.0287*</td>
</tr>
</tbody>
</table>

*p < .05.

Parents

Table 28 shows the standardized discrimination function weights for the six KFD family hierarchy variables. The means on the discriminant function were
-0.43798 for the clinic group and 0.41319 for the non-clinic group.

### TABLE 28

**DISCRIMINANT FUNCTION WEIGHTS**

**HYPOTHESIS 10--PARENTS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of father fig</td>
<td>-1.19028 (2)</td>
</tr>
<tr>
<td>Size of mother fig</td>
<td>0.89153 (3)</td>
</tr>
<tr>
<td>Size of child fig</td>
<td>-0.25812</td>
</tr>
<tr>
<td>Vert disp father</td>
<td>1.43147 (1)</td>
</tr>
<tr>
<td>Vert disp mother</td>
<td>0.06081</td>
</tr>
<tr>
<td>Vert disp child</td>
<td>0.70686 (4)</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. In this case, although the weight for vertical displacement of child is slightly less than 50% of the maximum weight, it is logical to include it in the interpretation.

The analysis indicates that the KFD drawings of non-clinic parents, compared to those of clinic parents, show Father Higher in the Picture, but Smaller in Size, Mother Larger in Size, and Child Higher in the Picture.

**Children**

Table 29 shows the standardized discriminant function weights for the six KFD Family Hierarchy variables. The means on the discriminant function were
-.36561 for the clinical group and .31860 for the non-clinic group.

TABLE 29
DISCRIMINATION FUNCTION WEIGHTS
HYPOTHESIS 10—CHILDREN

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of father fig</td>
<td>.23729</td>
</tr>
<tr>
<td>Size of mother fig</td>
<td>.99902 (1)</td>
</tr>
<tr>
<td>Size of son fig</td>
<td>.37711</td>
</tr>
<tr>
<td>Vert disp mother</td>
<td>.08224</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis indicates that the KFD drawings of the non-clinic children, compared to those of clinic parents, show that non-clinic children tend to draw Mothers Larger in Size than the others.

Hypothesis 11

Hypothesis 11 stated that there is no linear combination of the KFD Family Subsystems variables which significantly discriminate between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 df for the test of the resulting Chi-square. Table 30 shows the results.
The Chi-square and $p$ show that discriminant analysis is significant for none of the subgroups.

### TABLE 30

DISCRIMINANT ANALYSIS—HYPOTHESIS 11

<table>
<thead>
<tr>
<th>Group</th>
<th>Chi-square</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>17.167</td>
<td>.1030</td>
</tr>
<tr>
<td>Parents</td>
<td>13.523</td>
<td>.2605</td>
</tr>
<tr>
<td>Sons</td>
<td>5.830</td>
<td>.8845</td>
</tr>
<tr>
<td>Daughters</td>
<td>13.777</td>
<td>.2456</td>
</tr>
<tr>
<td>Children</td>
<td>8.735</td>
<td>.6463</td>
</tr>
</tbody>
</table>

Hypothesis 12

Hypothesis 12 states that there is no linear combination of the KFD Family Boundaries variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 $df$ for the test of the resulting Chi-square. Table 31 shows the results.

There is significant discrimination between clinic and non-clinic families for mothers, parents, daughters, and children.

**Mothers**

Table 32 shows the standardized discriminant function weights for the 13 KFD Family Boundaries...
TABLE 31

DISCRIMINANT ANALYSIS--HYPOTHESIS 12

<table>
<thead>
<tr>
<th>Group</th>
<th>Chi-square</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>26.631</td>
<td>.0140*</td>
</tr>
<tr>
<td>Parents</td>
<td>27.881</td>
<td>.0094*</td>
</tr>
<tr>
<td>Sons</td>
<td>11.655</td>
<td>.5561</td>
</tr>
<tr>
<td>Daughters</td>
<td>29.106</td>
<td>.0063*</td>
</tr>
<tr>
<td>Children</td>
<td>27.510</td>
<td>.0106*</td>
</tr>
</tbody>
</table>

*p < .05.

TABLE 32

DISCRIMINATION FUNCTION WEIGHTS
HYPOTHESIS 12--MOTHERS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual features</td>
<td>-.29089</td>
</tr>
<tr>
<td>Different positions</td>
<td>.02088</td>
</tr>
<tr>
<td>Generational boundaries</td>
<td>.69357  (2)</td>
</tr>
<tr>
<td>Gender differences</td>
<td>.05384</td>
</tr>
<tr>
<td>Orient father/mother</td>
<td>.02785</td>
</tr>
<tr>
<td>Orient father/child</td>
<td>.10701</td>
</tr>
<tr>
<td>Orient mother/child</td>
<td>.07118</td>
</tr>
<tr>
<td>Nurturing father</td>
<td>.04778</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>-.34476</td>
</tr>
<tr>
<td>Nurturing child</td>
<td>.03817</td>
</tr>
<tr>
<td>Cooperation father</td>
<td>-.32754</td>
</tr>
<tr>
<td>Cooperation mother</td>
<td>1.08175 (1)</td>
</tr>
<tr>
<td>Cooperation child</td>
<td>-.29696</td>
</tr>
</tbody>
</table>

variables. The means on the discriminant function were -.66613 for the clinic group and .64988 for the non-clinic group.

Variables are selected for inclusion in the interpretation in a similar way as in the canonical
correlation analysis. The analysis indicates that a family drawing with Mothers More Cooperative and more clear Generational Boundaries is more likely to be drawn by a non-clinic mother than a clinic mother.

Parents

Table 33 shows the standardized discriminant function weights for the 13 KFD Family Boundary variables. The means on the discriminant function were -.55307 for the clinical group and .57394 for the non-clinic group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual features</td>
<td>.46384 (3)</td>
</tr>
<tr>
<td>Different positions</td>
<td>.17200</td>
</tr>
<tr>
<td>Generational boundaries</td>
<td>.60186 (2)</td>
</tr>
<tr>
<td>Gender differences</td>
<td>.24123</td>
</tr>
<tr>
<td>Orient father/mother</td>
<td>.00461</td>
</tr>
<tr>
<td>Orient father/child</td>
<td>.10520</td>
</tr>
<tr>
<td>Orient mother/child</td>
<td>.23065</td>
</tr>
<tr>
<td>Nurturing father</td>
<td>-.26870</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>-.39114</td>
</tr>
<tr>
<td>Nurturing child</td>
<td>.05284</td>
</tr>
<tr>
<td>Cooperation father</td>
<td>.11251</td>
</tr>
<tr>
<td>Cooperation mother</td>
<td>.86885 (1)</td>
</tr>
<tr>
<td>Cooperation child</td>
<td>-.16701</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis indicated that a
family drawing with More Cooperative Mother, More Clear Generational Boundaries, and more Individual Features is more likely to be drawn by a non-clinic parent than a clinic parent.

**Daughters**

Table 34 shows the standardized discriminant function weights for the 4 KFD Family Boundaries variables. The means on the discriminant function were -.85495 for the clinic group and .71631 for the non-clinic group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual features</td>
<td>.39412</td>
</tr>
<tr>
<td>Different positions</td>
<td>-.47398 (4)</td>
</tr>
<tr>
<td>Generational boundaries</td>
<td>.07339</td>
</tr>
<tr>
<td>Gender differences</td>
<td>-.32634</td>
</tr>
<tr>
<td>Orient father/mother</td>
<td>-.22167</td>
</tr>
<tr>
<td>Orient father/child</td>
<td>.41467 (6)</td>
</tr>
<tr>
<td>Orient mother/child</td>
<td>.46233 (5)</td>
</tr>
<tr>
<td>Nurturing father</td>
<td>-.22198</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>.64962 (2)</td>
</tr>
<tr>
<td>Nurturing child</td>
<td>-.64340 (3)</td>
</tr>
<tr>
<td>Cooperation father</td>
<td>.85660 (1)</td>
</tr>
<tr>
<td>Cooperation mother</td>
<td>.16226</td>
</tr>
<tr>
<td>Cooperation child</td>
<td>.39424</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis indicates that a family picture showing More Cooperative Father, More
Nurturing Mother, less Nurturing Child, less Different Positions or Activities Together, more Orientation Facing Each Other Mother/Child and more Orientation Father/Child is likely to be drawn by a non-clinic daughter than a clinic daughter.

Children

Table 35 shows the standardized discriminant function weights for the 13 KFD Family Boundaries. The means on the discriminant function were -.46271 for the clinic group and .45069 for the non-clinic group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual features</td>
<td>.10850</td>
</tr>
<tr>
<td>Different positions</td>
<td>-.22013</td>
</tr>
<tr>
<td>Generational boundaries</td>
<td>.12009</td>
</tr>
<tr>
<td>Gender differences</td>
<td>.04851</td>
</tr>
<tr>
<td>Orient father/mother</td>
<td>-.09020</td>
</tr>
<tr>
<td>Orient father/child</td>
<td>.38238</td>
</tr>
<tr>
<td>Orient mother/child</td>
<td>.00934</td>
</tr>
<tr>
<td>Nurturing father</td>
<td>-.08037</td>
</tr>
<tr>
<td>Nurturing mother</td>
<td>.31894</td>
</tr>
<tr>
<td>Nurturing child</td>
<td>-.59573</td>
</tr>
<tr>
<td>Cooperation father</td>
<td>.43967</td>
</tr>
<tr>
<td>Cooperation mother</td>
<td>.44111</td>
</tr>
<tr>
<td>Cooperation child</td>
<td>-.01193</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as the canonical correlation analysis. The analysis indicates that a
picture showing less Nurturing Child, more Cooperative
Mother, more Cooperative Father, Father and Child Facing
Each Other, more Nurturing Mother, is more likely drawn
by non-clinic than clinic children.

Hypothesis 13

Hypothesis 13 states that there is no linear
combination of the KFD Family Adaptation variables which
significantly discriminates between clinic and non-clinic
samples.

This hypothesis was tested by discriminant
analysis for various subgroups of subjects. For each
subgroup there was one discriminant function, and 6 df
for the test of the resulting Chi-square. Table 36 shows
the results.

There is significant discrimination between
clinic and non-clinic families for mothers, parents,
daughters, and children.

<table>
<thead>
<tr>
<th>Group</th>
<th>Chi-square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>25.262</td>
<td>.0003*</td>
</tr>
<tr>
<td>Parents</td>
<td>25.547</td>
<td>.0003*</td>
</tr>
<tr>
<td>Sons</td>
<td>6.737</td>
<td>.3458</td>
</tr>
<tr>
<td>Daughters</td>
<td>25.977</td>
<td>.0002*</td>
</tr>
<tr>
<td>Children</td>
<td>22.777</td>
<td>.0009*</td>
</tr>
</tbody>
</table>

*p < .05.
Mothers

Table 37 shows the standardized discriminant function weights for the six KFD Family Adaptation variables. The means on the discrimination function were -.62783 for the clinic groups and .61252 for the non-clinic group.

### TABLE 37

**DISCRIMINANT FUNCTION WEIGHTS**

**HYPOTHESIS 13—MOTHERS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual differentiation</td>
<td>-.11853</td>
</tr>
<tr>
<td>Activity level of father</td>
<td>.29587</td>
</tr>
<tr>
<td>Activity level of mother</td>
<td>.46499 (2)</td>
</tr>
<tr>
<td>Activity level of child</td>
<td>.67579 (1)</td>
</tr>
<tr>
<td>General impression family</td>
<td>.41711 (3)</td>
</tr>
<tr>
<td># of human figures</td>
<td>.03643</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation. The analysis indicates that a picture showing more Active Child, more Active Mother, and a Family More Attractive to Live In is more likely to be drawn by a non-clinic than a clinic mother.

Parents

Table 38 shows the standardized discriminant function weights for the four KFD Family Adaptation variables. The means on the discriminant function were
-.51598 for the clinic group and .53545 for the non-clinic group.

### TABLE 38

**DISCRIMINANT ANALYSIS—HYPOTHESIS 13 PARENTS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual differentiation</td>
<td>-.02799</td>
</tr>
<tr>
<td>Activity level of father</td>
<td>.19211</td>
</tr>
<tr>
<td>Activity level of mother</td>
<td>.44172 (3)</td>
</tr>
<tr>
<td>Activity level of child</td>
<td>.52130 (1)</td>
</tr>
<tr>
<td>General impression family</td>
<td>.49335 (2)</td>
</tr>
<tr>
<td># of human figures</td>
<td>.30089 (4)</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis indicates that a picture showing more Active Child, more Active Mother, a Family More Attractive to Live In, and more Human Figures is more likely to be drawn by a non-clinic than a clinic parents.

**Sons**

The Chi-square and p show that for none of the groups is there significant discrimination.

**Daughters**

Table 39 shows the standardized discriminant function weights for the six KFD Family Adaptation variables. The means on the discriminant function were
-.76889 for the clinic group and .64421 for the non-clinic group.

**TABLE 39**

DISCRIMINATION FUNCTION WEIGHTS
HYPOTHESIS 13—DAUGHTERS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual differentiation</td>
<td>-.17887</td>
</tr>
<tr>
<td>Activity level of father</td>
<td>.45658 (3)</td>
</tr>
<tr>
<td>Activity level of mother</td>
<td>.41482 (4)</td>
</tr>
<tr>
<td>Activity level of child</td>
<td>.19715</td>
</tr>
<tr>
<td>General impression family</td>
<td>.50642 (1)</td>
</tr>
<tr>
<td># of human figures</td>
<td>.47100 (2)</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis shows that a picture showing a more Attractive Family to Live In, more Figures, greater Activity Level of Fathers, and greater Activity Level of Mothers is more likely to be drawn by a non-clinic than a clinic daughter.

**Children**

Table 40 shows the standardized discriminant function weights for the six KFD Family Adaptation variables. The means on the discriminant function were -.41207 for the clinic group and .40137 for the non-clinic group.
TABLE 40
DISCRIMINATION FUNCTION WEIGHTS
HYPOTHESIS 13—CHILDREN

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual differentiation</td>
<td>.14817</td>
</tr>
<tr>
<td>Activity level of father</td>
<td>.54361 (1)</td>
</tr>
<tr>
<td>Activity level of mother</td>
<td>.39750 (3)</td>
</tr>
<tr>
<td>Activity level of child</td>
<td>.16247</td>
</tr>
<tr>
<td>General impression family</td>
<td>.50761 (2)</td>
</tr>
<tr>
<td># of human figures</td>
<td>.19586</td>
</tr>
</tbody>
</table>

Variables are selected for inclusion in the interpretation in a similar way as in the canonical correlation analysis. The analysis indicates that a picture showing greater Activity Level of Fathers and of Mothers, and a Family More Attractive to Live In, is more likely to be drawn by non-clinic children than by clinic children.

Hypothesis 14

Hypothesis 14 states that there is no linear combination of the eight SFIS-R variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 df for the test of the resulting Chi-square. Table 41 shows the results.
TABLE 41

DISCRIMINANT ANALYSIS—HYPOTHESIS 14

<table>
<thead>
<tr>
<th>Group</th>
<th>Chi-square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>8.220</td>
<td>.4122</td>
</tr>
<tr>
<td>Parents</td>
<td>12.933</td>
<td>.1352</td>
</tr>
<tr>
<td>Sons</td>
<td>8.909</td>
<td>.3500</td>
</tr>
<tr>
<td>Daughters</td>
<td>14.974</td>
<td>.0597</td>
</tr>
<tr>
<td>Children</td>
<td>13.640</td>
<td>.0916</td>
</tr>
</tbody>
</table>

The Chi-square and p show that there is no significant discrimination for any of the subgroups: mothers, parents, sons, daughters, or children.

Qualitative Analysis

The use of drawings during the family assessment gives the clinician an alternative way of observing family dynamics. As a nonverbal approach, drawings provide a way for sharing family perceptions which are beyond the everyday experiences of the members. There appeared to be differences between the clinic and non-clinic group revealed through interviews, testing process, and drawings.

After interviewing these participants, it appeared that the clinical families were very wary of this study (particularly adolescents). Family members would relax and become more comfortable with me or other counselors who helped in this project. It seems, however, there was always in this group a lapse of time.
in getting involved and interested in the study. Non-clinic participants were more open, friendly, and showed little resistance to participating and answering questions about themselves and the family. Many of the non-clinic participants did not question the purpose and usefulness of this study as the clinical group did during the initial interview.

During the test in process, family members of the clinical group would sometimes become involved when the participants were at the table doing the testing, but not too often. It seems like the participants were distanced from the rest of the family because no one else would even enter the testing room or show interest in the study. When the testing took place at the counseling office, only the participants came—without any other family member. Non-clinic families would sit around or be close to the testing table at home, or showed up with the participants when the testing took place at the office or school. In this group, each one was very curious about the study and the possible results.

Evaluation regarding drawing performance revealed also some interesting differences between both groups. In the clinic group, family members hesitated before starting, becoming easily frustrated during execution of the drawing, drew quickly, and sometimes drew stick figures, cartoon figures, or figures missing body parts. Participants often drew figures with no arms, no hands,
no legs, or no feet. All were asked to draw a whole person, not a stick person or a cartoon, but a whole person. In the non-clinic group, family members were eager to draw, expended more time on the task, and included more details in the drawings. The clinic subjects omitted twice as many body parts as the non-clinic group.

Table 42 shows a comparison between the clinic and non-clinic representations or omissions of father or mother in the drawings by the participants. The clinic population showed more cases where the father and mother were at home, but not included in their drawings, than non-clinic participants. The clinic participants also revealed more cases where the father and the mother were not at home but were included in the drawings. Clinic sons seem to be the ones who included more often the father in their drawings, although the father was not living with the family at home at the time of the testing.

As I looked at the drawings performed for each family member and I placed them all together to see how they looked as a Family Unit, I noted very useful qualitative information related to the family functioning in terms of the Structural Family Theory.

Clinic and non-clinic families do not reveal major differences in their drawings related to family therapy. In general, both groups seem to perceive parents working as a team and making the decisions;
**TABLE 42**

**FATHER AND MOTHER REPRESENTATION IN THE DRAWINGS**

<table>
<thead>
<tr>
<th></th>
<th>Clinic Cases</th>
<th></th>
<th>Non-Clinic Cases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
<td>Son</td>
<td>Daughter</td>
</tr>
<tr>
<td>Father AT home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOT in the drawing</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Father NOT at home</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>but IN the drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother AT home</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>NOT in the drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father NOT at home</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>but IN the drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
mother however is playing a major role in the family interactions. Considering the total drawings by both participants, approximately 40% drew the mother as the biggest figure, 14% drew the father, 33% the children, and 11% the parents together. In the KFD inquiry process related to the drawings completed by each subject, however, the participants tended to describe the father as the family authority, but the decisions were made by either both parents or only the mother.

The subsystem interactions among the clinic family members showed more disturbed relationships than the non-clinic families. Clinic subjects sometimes portrayed the family members smoking, using alcohol, drugs (marijuana, cocaine, and heroin), fighting, arguing, and carrying guns. There were instances where the child drew the family in conflict situations in contrast with the parents who drew a traditional family activity. Very often members of the family were also portrayed with sad or angry expressions, crying, and involved in isolated activities. In contrast, the non-clinic group drawings showed only one case of fighting and a more positive context of family members relatedness. It seems that this group reflected less conflicts and problems in their interactional style.

Within a Family System, the Boundaries help safeguard each subsystem autonomy while maintaining the interdependence and cooperation of all of the subsystem
members. In this study, the clinic families seemed less cooperative in carrying family functions and less differentiated than the non-clinic group. In the clinic families about 37% were portrayed as involved in some family activities, in contrast with 63% on the non-clinic families. Twice as many fathers and children and about 1/3 more mothers cooperated more in family functions and tasks in the non-clinic group than the clinic group. In both groups, the mother was almost always portrayed cooking or cleaning at home; the father was portrayed doing other work activities, watching TV, or sleeping. Daughter appeared more identified with the mother's household role and responsibilities, meanwhile, sons seemed more identified with the father's male role within the family.

In terms of Adaptation to adolescents developmental stages and autonomy processes there appears to be some differences in age and sex groups. In the clinic group, males, 12 to 15 years old, drew themselves approximately 42.3% bigger (as compared to other figures in the same drawings) and 57.7% smaller. Sixteen- to 20-year-olds drew themselves approximately 36.6% bigger and 63.3% smaller, isolating themselves more often than other adolescents. Females, 12 to 15 years old, drew themselves approximately 66.6% bigger and 33.3% smaller. Sixteen- to 20-year-olds drew themselves 68.8% bigger and 31.2% smaller.
In the non-clinic group, males, 12 to 16 years old, drew themselves approximately 57.7% bigger and 42.3% smaller. Sixteen- to 20-year-olds, drew themselves 69% bigger and 31% smaller. Females, 12 to 16 years old drew themselves 62.5% bigger and 37.5% smaller. Sixteen- to 20-year-olds drew themselves 30.7% bigger and 69.3% smaller. This group revealed less isolated figures than the clinic adolescent group. It seems that the non-clinic group males reflect a better family adjustment condition than the clinic males, although both groups appeared to be dealing at different degrees of difficulty with self-esteem, dependence/independence, and individuation issues.

The females drawings, however, reflect a different direction. In the clinic group, females may have become less confident with themselves as they moved to late adolescence and felt confused about their life's purposes and roles. In the non-clinic group, females 12 to 15 years old showed a similar direction as the clinic females. The 16- to 20-year-olds, however, appeared to confront more challenges as they searched and explored for identification, purpose, and autonomy. Cultural factors idiosyncratic to adolescents and education levels may have had a decisive influence on these figure drawings and findings, particularly with the adolescent female role in the Hispanic family.
Chapter 4 has presented an analysis of data obtained from Hispanic American clinic and non-clinic families. Various demographic characteristics of the sample were first presented, and then the basic normative data for the SFIS-R, FACES II, and KFD. Last, the results from the tests of the 14 hypotheses were also presented. Multiple linear regression analysis was used for hypotheses 1, 3, 4, 5, and 6. Canonical correlation analysis was used for hypothesis 2. Hypotheses 7 and 9 were tested by t-test for means of two independent variables. Hypotheses 10 to 14 were tested by discriminant analysis. All hypotheses were tested for various subsets of subjects provided the number of subjects in the subset was great enough. Of the 14 hypotheses, several were partially rejected for the various subsets of subjects which variables tested significant.

The qualitative analysis of the drawings appeared to reveal some differences between the clinic and non-clinic group considering the interview, testing procedures, and family schematizations. These qualitative evaluations have been based on my personal clinical observations as well as in the inquiry phase of the KFD drawings, when the subjects were asked to complete a questionnaire related to the drawing. These questions were associated with the concepts of family
functions as related to the purpose and framework of this study. This inquiry phase was very helpful to clarify the drawer's productions and to investigate his/her views about their family dynamics. The ultimate goal of this post-drawing inquiry phase was to elicit more information as well as to better understand his/her drawings projections. (See Appendix: KFD inquiry process.)
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study, discussion and implications of the findings, and recommendations for further research. The summary briefly describes the problem statement, review of literature, the purpose for the study, methodology, and findings. Based on the findings, the conclusions and recommendations are given.

Summary

Statement of the Problem

Despite the use of drawings by clinicians and school psychologists in performing individual and family evaluations (Oster & Gould, 1987; Reynolds, 1978), the literature does not describe any study to explore the suitability of the KFD as a measure of structural patterns of family functioning among the Hispanic American families with substance-abusing and nonsubstance-abusing adolescents (Esquival, 1992; Fabrega, 1995; Padilla, 1992; Rogler et al., 1989; Rueschenberg & Buriel, 1995). In addition, there is a lack of valid instruments in the United States which take into account
the Hispanic cultural background and identity in the evaluation practice (Dana, 1995).

The 1992 APA Ethical Code urges practitioners to become responsible for developing their own cultural competence in assessment practice (American Psychological Association [APA], 1992). Cultural competence in assessment of Hispanics requires an understanding of the client's cultural history and beliefs prior to service. It also implies the need of developing cultural-sensitive assessment instruments valid for Hispanic populations (Avila-Espada, 1986; Cervantes et al., 1990; Padilla, 1979).

Problems associated with assessment instruments that have been used for years with Hispanic American people have been well documented by the literature and include inappropriate use of normative data obtained with non-Hispanic samples for generating diagnostic categories with Hispanics, defective translations of instruments in Spanish, and inappropriate test tool items, bias in clinical judgment, inaccurate assessment and diagnosis because cultural factors and lack of deliniation of cultural identity status prior to services (Cervantes & Arroyo, 1995; Dana, 1995; Rogler et al., 1990).

Thus, there is a need to offer culturally valid psychometric testing procedures and drawing techniques with this population. In particular, there are no data substantiating the validity of the KFD measure of
structural patterns of family functioning for use with Hispanic American families.

Overview of Related Literature

Structural Family Therapy Model

The Structural Family Therapy model, which encompasses both a conceptual and intervention approach, was developed initially by Salvador Minuchin, M.D., and his colleagues in the 1960s as they worked with disadvantaged Puerto Rican and Black youngsters and their families at the Wiltwyck School, New York (Minuchin, 1982). Subsequently the structural approach was refined and extended in work at the Philadelphia Child Guidance Clinic through research studies conducted under Minuchin's direction (Minuchin, 1987).

The Structural Family Therapy Model is one of several that has evolved within the broader model of family system theory. In family system theory, the family is viewed as an open system. A system may be defined as a whole which functions the way it does by virtue of the inter-dependent parts. An open system is one in which there are communication and interaction between the system and its environment (Goldenberg & Goldenberg, 1991).

Minuchin's (1974) conceptual schema of Structural Family Functioning basically has three concepts. First, the structure of the family is an open sociocultural
system in transformation. Second, the family undergoes development, moving through a number of stages that require structuring. Third, the family adapts (changes) its power distribution structure, role functions, and relationship rules in response to new like-conditions and developmental changes.

The approach focuses on the Family Structure, that is, the family's repetitive patterns of interaction within the family system. The Family Structure System is not defined by family composition but rather by the invisible set of functional demands that organizes the ways in which family members interact and operate through transactional patterns of how, when, and to whom family members relate. In assessing structural processes, this model takes into account the following structural dimensions of family functioning: Family Hierarchy, Family Subsystems, Family Boundaries, and Family Adaptability (Minuchin, 1974).

The Kinetic Family Drawing

The use of projective drawings has been widespread in psychology, mental health practice, and in school counseling settings. Knoff (1986), in a review of the projective drawing literature, suggested that projective drawings have been useful for the following functions: (1) to allow nonverbal children to express themselves; (2) to gain an understanding of a child's
inner conflicts and interactions; (3) to understand the child from a psychodynamic perspective; and (4) to serve as a starting point for further evaluation. Buck (1948), Machover (1949), and Hammer (1968) have been considered the main proponents of the use of figure drawings as projective instruments (Oster & Gould, 1987).

In 1970, Burns and Kaufman developed the Kinetic Family Drawing (KFD), a projective technique used to assess children's self-concept and perceptions of the interpersonal relationships within the families (Mostkoff & Lazarus, 1983). The KFD tool, in which the child is instructed to draw a picture of his family doing something, has been used by school and clinical psychologists in evaluating children's perceptions of themselves, their families, and the dynamics of their family interactions (Reynolds, 1978).

The introduction of drawings and the KFD into the family session also gives the clinician an alternative way of observing family system organization and family functioning (Gardano, 1988; Schwartz, 1981). There are family hierarchies, subsystems, boundaries, and adaptation changes, among other factors, to be observed in performing family evaluations using drawings (Oster & Gould, 1987).

Since the introduction of the KFD, research has demonstrated high interscorer reliability for this technique. Several studies also have explored and
reported different degrees of success in their attempt to show the validity of the KFD as a diagnostic tool (Conant, 1988; Cummings, 1980; Gardano, 1988; Jordan, 1985; Layton, 1984; McPhee & Wegner, 1976; Mostkoff & Lazarus, 1983; Shaw, 1989). Other studies have also showed the usefulness and applicability of the KFD to assess family dynamics in cross-cultural populations (Burns, 1982; Cabacungan, 1985; Cho, 1987; and Ledesma, 1979; Shaw, 1989).

**Hispanic American Families**

Hispanic is a generic term that refers to all people of Spanish origin who reside in the United States (Padilla, 1979, 1995; Soriano, 1995). In this study the term Hispanic includes all people of Spanish origin and descent. The Hispanic community is diversified and heterogeneous. There are wide ranges of important differences related to national origin, race, class, migration and sociopolitical history. Nevertheless, there are also important similarities among Puerto Rican, Chicano or Mexican American, Cuban, and other Central and South American descendants. The similarities involve, among other traditional values, the Spanish language, which serves as a cultural unifying factor for all Hispanics and also family values (Bernal et al., 1983; Soriano, 1995).

The family (La Familia) is the single most
important institution for the Hispanic people (Soriano, 1995). An essential characteristic of the Hispanic family is a strong commitment to family values and attachments, or "familism" (Hernandez, 1995). Familism also includes obligations, support among members of the same family, loyalty, and strong feelings of solidarity (Hurtado, 1995; Sabogal et al., 1987). The family is a source of strength and identity (Bernal et al., 1983). Family members look first to the family to meet both their material and emotional support as well as to facilitate the resolution of conflicts (Marin & Marin, 1991). The Hispanic family has its own Family Structure and function.

In the Hispanic family, distribution of authority is hierarchical and is centered on the father. Traditionally the role of the father has been that of decision maker and disciplinarian. The father may focus more of his attention upon the economic welfare and well-being of the family and less upon expressive and emotional issues. The mother balances the father's role through her investment in the welfare and emotional support of the children. Thus, the children become attached to the mother and grow up expecting support from her, while the father may appear distant (Bernal et al., 1983; Diaz-Guerrero, 1985; Soriano, 1995).

The marital relationship has been defined in terms of male dominance and female submission. The
husband is expected to be dignified and hardworking. The wife's role is to care for the home, children, and remain submissive under the authority of the husband. Actually, the mother may be the true power behind the surface of family functioning (Garcia-Preto, 1982).

The sibling subsystem is also characterized by a male sex-role dominance (Ho, 1987). In traditional families, sons have a great deal of independence, in contrast to the daughters, who are protected by the family and are not allowed the same freedom as the sons. The daughter is expected to be submissive in relation to the male and help with housework (Carrillo, 1982; Falicov, 1982).

The boundaries in the Hispanic family structure tend to be more enmeshed and overinvolved than White American families. The typical nuclear family is embedded in an extended family with open boundaries which include other family members, such as cousins, aunts, uncles, and grandparents (Canino & Canino, 1980).

Ho (1987) cautioned not to assume that the family boundary is diffused because the spousal system is structured hierarchical instead of egalitarian. Because the spousal system boundary is never that close, it may not be so susceptible to the processes of triangulation, a three-person system in the family. The central nurturing role of the mother and the disciplinarian role of the father may create an alliance between mother and
child that will exclude the father, but such coalition is well accepted within the Hispanic family structure. In addition, the Hispanic wife's sense of familism and family loyalty discourages her from subverting her child's relationship with his father.

The Hispanic family adaptability has received some attention in the literature. In general, it seems that the family is a flexible institution which adapts to changing environmental conditions (Vega et al., 1983). Hispanic families are likely to have the ability to try new ways of dealing with problems or shifting responsibilities from person to person (Vega et al., 1986).

It is important to point out, however, that this schema of the traditional Hispanic family structure has experienced changes because of unemployment, undermining of the parent's authority, increase in divorce rate, and single-parent families (Canino, 1982). In 1980, about 1 in 5 children (21.2%) lived with one parent. By 1987 this had increased to 28.9% for Hispanics, whereas the proportion of White children in single-parent families remained much lower and grew at a lesser rate in the United States (Soriano, 1995).

Family Context of Adolescent Substance Abuse

In recent years the role of the family in adolescent substance use and abuse has received increased
attention (Burns, 1990). Much of this concern emphasizes the relationship between family system dynamics and individuation difficulties. Research has also showed a strong relationship between adolescent substance abuse and family drug usage, family composition, family interactions patterns, and discrepancies in family perceptions (Denton & Kampfe, 1994).

Families with substance-abusing adolescents are characterized by a variety of dysfunctional problems, including a hierarchical structure that is reversed or confused because one of the children has more power than one or both parents (Lewis et al., 1991). Other studies have found poor interaction processes, ineffectual conflict resolution, absence of communication, lack of enjoyment within the family unit, and family dysfunctional patterns such as triangulation and cross-generational alliances with children that separate parents from each other (Kaufman & Kaufman, 1992). The family subsystem organization is confused.

The family of substance-abusing adolescents also has been described as enmeshed, overprotective, rigid, and unable to negotiate the shifts necessary to allow for the adolescent's individuation and identity development (Bartle & Sabatelli, 1989). In families where adolescent drug abuse is a key element, this developmental process is usually arrested, and the youth functions in a pseudo-adult mode of separation. The drug taking may be
seen as a maladaptive solution to the dilemma of separation and autonomy (Schoor & Beach, 1993).

The literature on Hispanic family structure and adolescent substance abuse shows similar findings: Maladaptive family interaction patterns, fragmentation of family organization, family unresolved conflicts, spouse's emotional distance, strong alliances between an adolescent and one parent, poor communication, enmeshment, overinvolvement mother-child relationship, a distant father and breakdown of family hierarchy within the family system (Delgado, 1990; Florez-Ortiz & Bernal, 1990; Rio et al., 1990).

Some studies indicated that strong emotional bonds among family members may reduce the risk for adolescents' substance use. It was reported that family cohesion (or bonding) was negatively related to substance abuse in adolescents (Sinha-Fagan, Gersten, & Langner, 1986; Steinglass, 1984; Volk et al., 1989). Substance abuse also appears to be reduced in families with more open communication and flexibility between parents and adolescents (Anderson & Henry, 1994). The following factors have been negatively associated with later adolescents' drug use and abuse: positive and warm relationships between the child and his parents, parental modeling, getting along, parental praise and encouragement, clear and consistent limit-setting rules, development of feelings of trust, and parental
Purpose of the Study

The primary purpose of this study was to explore the suitability of the KFD technique as a measure of Minuchin's structural family concepts among Hispanic American families with substance-abusing and nonsubstance-abusing adolescents within the framework of Minuchin's (1974) Structural Family Theory. A secondary purpose was to identify differences in the structural concepts of family functioning of the Hispanic families by comparing both family groups (clinic and non-clinic) using Minuchin's Structural Family Constructs of family functioning and their scores on SFIS-R and FACES II.

Methodology

Sample

The sample for this study was 141 Hispanic American families with adolescent children 12 through 20 years of age, who resided in Chicago, Illinois, and South Michigan. The clinic sample consisted of 74 families with a substance-abusing adolescent under treatment in a clinic facility. The non-clinic sample included 67 families with adolescent subjects who were drug-free at the time of this study. The total sample included 260 participants in both groups. Participation depended on
permission from the counseling agencies, school administrators, parents, and adolescents themselves. A random sampling of the population was not possible because family participation depended upon the willingness of agencies, parents, and children to cooperate.

**Instrumentation**

A demographic form interview was used to gather demographic information regarding the family. Each subject was asked to draw a KFD and answer the Structural Family Interaction Scale-Revised (SFIS-R) and the Family Adaptability and Cohesion Scales (FACES-II).

The KFD is a projective technique developed by Burns and Kaufman (1970), and it is administered by asking the participant to draw his or her family, including himself or herself, doing something. They found that the use of kinetic instructions resulted in family drawings which contain more dynamic information about the subject's perceptions of family interaction patterns than the drawings produced without kinetic instructions.

Different studies have found that the KFD is a valid and useful technique in various settings such as differentiating between boys and girls, younger and older children, and children from clinic and non-clinic populations (Conant, 1988), establishing differences
between divorced and intact family variables (Annunziata, 1983), developmental differences among first- and fifth-grade students (Acosta, 1989), ability to discriminate between psychosomatic families having an anorexia nervosa child and normal families (Schwartz, 1981) and, to reflect different styles of functioning among alcoholic and non-alcoholic families using structural concepts (Gardano, 1988). Other studies have provided more information regarding the validity and reliability of the KFD (Chartouni, 1992; Cho, 1987; Rodgers, 1992; Shaw, 1989).

The Structural Family Interaction Scale-Revised (SFIS-R) was developed by Perosa et al. (1981), and revised by Perosa and Perosa (1987) for identifying ways in which family members interact with one another. It contains an 85-item questionnaire with eight scales which operationalized Minuchin's Structural Family Concepts. The SFIS-R has been used successfully to identify variables related to family functioning as well as to differentiate a variety of dysfunctional families from healthy families (Kramer, 1983; Perosa & Perosa, 1982; Perosa & Perosa, 1987).

The Family Adaptability and Cohesion Scales (FACES II) is a self-report instrument of 30 items with a 5-point response scale, based on Olson's Circumplex Model (Olson et al., 1992). It measures two central dimensions: adaptability and cohesion. According to
Olson et al. (1992), the concurrent validity for FACES II is good. FACES II has been used by researchers and clinicians to assess a variety of family system issues, including families with substance-abusing adolescents.

Analysis of Data

Fourteen hypotheses were tested. Multiple linear regression analysis was used for hypotheses 1, 3, 4, 5, and 6. Canonical correlation analysis was used for hypothesis 2. Hypotheses 7 to 9 were tested by the t-test for means of two independent samples. Hypotheses 10 to 14 were tested by discriminant analysis. All hypotheses were tested for various subsets. All were presented in null form and were tested using the .05 level of significance.

Findings and Discussion

The findings of this study are summarized by considering each of the 14 null hypotheses which were tested.

Hypothesis 1

There is no significant multiple correlation between a linear combination of the KFD Family Hierarchy variables and the Parent Coalition/Cross-Generational Triads of SFIS-R.

This hypothesis was tested separately for various subgroups. The all subsets regression analysis for all
subsets was performed for mothers, parents, sons, daughters, and children. For mothers, parents, and daughters the null hypothesis was retained ($p > .05$). There is no statistically significant multiple correlation between the scores obtained from the KFD Family Hierarchy variables and the scores obtained from Parent-Coalition/Cross-Generational Triads variable of SFIS-R. For sons and children, however, the null hypothesis was rejected.

Results from the regression analysis indicated that for sons and children there is a significant relationship between the KFD Family Hierarchy variables and the Parent Coalition/Cross-Generational Triads variable of SFIS-R. The higher they placed themselves in the family drawings, the greater the coalition between parents.

**Discussion.** The results of the regression analysis appear to indicate that the son's and children's higher placement of themselves in the family drawings is associated with clear coalition between parents. In this coalition, parents are working together as a team in household management without allowing any competing Parent-Child Coalition or Cross-Generational Triads within the family system.

According to Minuchin (1974), in functional families there is a strong parental coalition and marital
relationship bond, and children grow up knowing that the parents will operate as a cohesive unit, supporting one another in managing family decisions. Although parents may have disagreements, they do not involve the children, forcing them to take parental roles. Parent-child coalitions are absent. Husbands and wives exercise a united authority as parents. Children, in turn, learn from them not only ways to interact with authority figures, but also how to function as a member of an organized family system.

The vertical placement of adolescents in the family drawings, in relationship with the parents' figures, may also indicate the adolescent's developmental needs for both age-appropriate autonomy and guidance. As the children grow and come in touch with extrafamilial peers, school, and other socializing forces outside the family, the demands for autonomy and independence from the traditional parental interactions increase. In this context, the adolescents require a realignment in the nature of parent-child interactions. These developmental influences and changes move the adolescents a little away from the parental subsystem (Minuchin, 1974).

The interaction or isolation between parent figures and adolescent figures in the drawings has been investigated by various researchers. Brewer (1980) examined the patterns of interaction or isolation of figures in the KFDs of 422 normal children, ages 7 to 11.
in terms of behavioral adjustment. His results showed that there is a correlation between levels of interaction and developmental influences. The isolation of figures may be related to developmental influences.

Thompson's (1975) study with adolescents found that most KFDs were characterized by figures depicted in isolated activity. McGregor (1978) found that distance between figures revealed that older children (age not specified) showed more distance between family figures than younger children. The control group children placed their parent figures further apart. Gardano (1988) stated that isolated figures have been commonly found in the KFDs of normal adolescents. In addition, Burns and Kaufman (1972) and Schwartz (1981) considered also perceptions of power or importance to be associated with vertical displacement or elevation of significant others in the family drawing.

In the structure of the Hispanic family, both parents work together in their children's guidance and education. The father assumes more often an instrumental role of disciplinarian, provider, protector, and leader. The mother is expected to assume the traditional role of homemaker and caretaker. This central nurturing role of the mother and the disciplinarian role of the father may create an alliance between mother and child that excludes the father, but such coalition is well accepted within
the Hispanic family structure (Gonzalez, 1982; Ho, 1987; Staples & Mirande, 1980).

In addition, the average well-functioning Hispanic family will not be easily susceptible to the process of faulty alliances because parents tend to set a certain amount of distance between themselves and their children (Canino & Canino, 1980). Children grow up expecting to show respect, loyalty, and support for their parents, family members, and authority figures. However, substance abuse literature with Hispanic families found that adolescent substance abuse is associated with maladaptive structural family interactions, which are also characterized by strong alliances between one parent and the adolescent (Florez-Ortiz & Bernal, 1990; Rio et al., 1990).

Thus, the vertical placement of adolescents in the family drawings in relationship with the parent figures may indicate a clear coalition between both parents as well as the adolescent's needs for both age-appropriate autonomy and guidance.

**Hypothesis 2**

There is no significant canonical correlation between a linear combination of the KFD Family Subsystem variables and the three SFIS-R variables Spouse Conflict Resolved/Unresolved, Mother-Child Cohesion/Estrangement, and Father-Child Cohesion Estrangement.
This hypothesis was tested by canonical correlation analysis for mothers, parents, sons, and children, and it was not significant. The null hypothesis was retained (p = > .05) for this group of subjects.

For the subgroup of daughters the null hypothesis is rejected (p < .05). However, there is only a modest relationship between the KFD family subsystems variables and the three SFIS-R variables, Spouse Conflict Resolved/Unresolved, Mother-Child Cohesion/Estrangement, and Father-Child Cohesion/Estrangement for daughters. The canonical correlation analysis found only a weak relationship between the combination of three SFIS-R variables and the KFD Family Subsystem. Therefore, we may say that there is no perceptible relationship between the KFD family subsystems variables and Perosa's set of variables.

Discussion. Perosa suggested to combine three variables in order to find any type of triangulation within the family subsystems interactions. However, she did not offer any additional information related to the effectiveness of this combination to make comparisons or to check our results. It looks like each of the separate variables in discussion is related to faulty alignments between subsystems, but these results showed a weak relationship between these two sets.
In order to corroborate these results, more statistical analysis was performed using other possible combinations of SFIS-R scales and KFD variables. A regression analysis was performed using the KFD Hierarchy variable, the Parent Coalition/Cross-Generational Triads, and distance between the father and mother, father and child, and mother and child variables. The results were not significant in terms of triangulations. Further, another regression analysis was performed using all the KFD variables and Perosa's triangulation scales. The results were not significant in terms of faulty alliances.

And, finally, a t-test analysis was performed comparing the clinic and nonclinic groups using the KFD subsystems variables and Perosa's triangulation variables. Again the results were not significant in terms of triangulations. These results are consistent with the qualitative analysis and overall findings of the present study.

Thus, there is no perceptible relationship between the KFD family subsystems variables and Perosa's variables. One might conclude, based on this analysis and results, that the KFD subsystems variables cannot be used as an accurate measure of family types of triangulation.
Hypothesis 3

There is no significant multiple correlation between a linear combination of the KFD boundaries and SFIS-R Enmeshment/Disengagement scale.

This hypothesis was tested separately for various subgroups using multiple-regression analysis. For sons, there were no significant correlations between KFD boundaries variables and SFIS-R enmeshment/disengagement scale. The null hypothesis was retained ($p > .05$). However, for mothers, parents, daughters, and children the null hypothesis was rejected ($p = < .05$).

The regression analysis for mothers indicated that the more Cooperative Self the mothers draw, the more Enmeshed is the family. For parents, the results indicated that the greater the Distance between the Father and the Child, the Father and the Mother, and the Mother and Child, and the more Cooperative the Child, the more Enmeshed the parents see the family. For daughters, the regression analysis showed that the greater the Distance between the Mother and the Daughter in the drawings, the more Enmeshed the daughters see the family. And, for children, the results indicated that the greater Cooperation of Mother shown in the children's drawings, the more Enmeshed they considered the family.

Discussion. One interesting finding here is that Cooperation Mothers, as seen by mothers and children, is
associated with family Enmeshment, and parents-sons Distance and sons' Cooperation, is associated with both Enmeshment and Disengagement (separateness). There appears to be a relationship between Cooperation Mother and family involvement, as well as between parents-sons Distance and family Enmeshment.

According to Olson et al. (1992), Cooperation reflects emotional bonding, Cohesion, and the family members sharing common interests together. This definition seems to agree with these findings. The mother figure in the family drawings is perceived by herself and by her children as emotionally involved and interested in each other's family welfare. Minuchin (1974) describes this condition as enmeshment and indicates an extreme form of proximity and intensity in family interactions. Generally, family members intrude in each other's thoughts and feelings and this tendency toward excessive togetherness brings about a lack of privacy, poor family differentiation, and boundary inadequacy. This condition has been also described by Wynne et al. (1958) as "pseudo-mutuality," by Bowen (1978) as "undifferentiated ego mass," and by Reiss (1971) as "consensus-sensitive family."

These results also showed a condition of Disengagement in the parents' drawings, reflected by the Distance between the father and the mother, between both parents and the child, and by a more Cooperative child.
It appears that parents and sons as "family insiders" may indeed associate family enmeshment with a condition of isolation among family members who may be experiencing emotional separateness, stress-induced family rigidity, and lack of Cohesion. These results seem to agree with other findings where overinvolvement (Enmeshment) is not likely to be synonymous with emotional closeness, mutuality, open communication, and affection (Bertle et al., 1989; Piercy et al., 1991; Brook et al., 1980; Brook et al., 1981; Volk et al., 1989).

It is important to understand that Minuchin's (1974) continuum of enmeshment (proximity) and disengagement (distance) refers to a relationship style. They do not necessarily imply function or dysfunction in themselves. Indeed, most families have enmeshed and/or disengaged interactions at one time or another. Whether the enmeshed family is the polar opposite of the disengaged family, or some varient of it, is a question that is still argued (Reiss, 1971). When couples and families have special difficulties in the closeness-distance axis, there is often a "ping-pong" relationship pattern, which reflects a movement back and forth between fluid and distance, and closeness and rigidity (White, 1980).

According to Minuchin (1974) and Minuchin et al. (1978), a dysfunctional family may show a condition of enmeshment-rigidity which is associated with family
problems and members' inability or unwillingness to change their unhealthy family interaction status quo. This view is reflected in his Psychosomatic Family Model as well as in his findings working with families of the slums. These psychosomatic families were described as being enmeshed, overprotective, rigid, and prone to conflict problems (Minuchin et al., 1975).

These psychosomatic conditions have also been found by researchers working with families with substance-abusing adolescents. They described these families, among other factors, as rigidly enmeshed with blurred relationships, and a lack of conflict resolution. When the boundaries between the families are inappropriately rigid, the system can be stressed by their isolation condition (Bartle & Sabatelli, 1989; Cleveland, 1981; Kaufman, 1981, 1986; Stanton & Todd, 1992). It seems that Minuchin's Psychomatic Model applies well to this hypothesis results where families seem to be portrayed as enmeshed by some family member drawers and as emotionally distant or rigid by others.

Although not much research with the KFD Cooperation Mother variable has interpreted distances between figures along the Enmeshment-Disengagement dimensions, as in the present study, some have examined the distance between the parents and the children. Bing (1970) found that interpersonal distance between family members may be reflected by the degree of distance they
put between themselves and other members of the family in the drawings. In this study, mothers were more frequently part of the family "scene" than fathers. Kuethe (1962) and Weinstein (1967) also noted that children and adults consistently placed mother-child figure pairs closer together than father-child figure pairs.

Horwitz, Duff, and Stratton (1964) and Brannigan, Schofield, and Holtz (1982) find that emotional distance is represented by linear distance on the drawing task. Reynolds (1978) also found that distance on drawings indicated isolation or rejection. Gerber (1977) assesses family distance regulations by administering a family of dolls placement task to each member in a family. She found that families with emotionally sick children versus normal families used differing distance regulations in their doll family arrangement. Her study is useful in supporting the notion that structural arrangements can be reflected on a projective measure and that family distance is also associated with family problems and different styles of relating.

These findings are also consistent with the role of the mother in the Hispanic family structure and functioning. The literature, overall, describes mothers as being more involved than the father in the family life. Canino and Canino (1980) saw the mother as a caregiver, being closer and more affectionate with the
children than the father. Carrillo (1982) depicted the mothers as often overprotective, frequently using physical gestures of touching when speaking to her children. The father was described as more distant.

Finally, it is essential to assess proximity and distance with caution. Minuchin (1974) stated that neither enmeshment nor disengagement is regarded as either "healthy" or "pathological." They are predisposing factors that could create difficulties in responding to changes and new demands within the structural dimensions of the family functioning.

**Hypothesis 4**

There is no significant multiple correlation between a linear combination of KFD Family Adaptability variables and the SFIS-R Flexibility/Rigidity scale.

This hypothesis was tested separately for various subgroups using regression analysis. For mothers, daughters, and children there were no significant relationships between KFD family adaptability variables and the SFIS-R Flexibility/Rigidity scale. The null hypothesis was retained for these subsets. However, for parents and sons, the null hypothesis was rejected.

Regression analysis indicated that the more Human Figures parents showed in their drawings, the more Flexible they considered the family. For sons, the results indicated that the greater the Activity Level of
the Father shown in the sons' drawings, the more Flexible
they saw the family.

**Discussion.** Results indicate that Family
Flexibility is associated with more Human Figures drawn
by parents in family drawings as well as with the
Activity Level of the Father shown in the sons' drawings.
Drawings by more Flexible Families may reflect a family
system with open boundaries to extended family members as
well as parents' ability to reorganize power structure,
family roles, and family rules in response to changing
circumstances and developmental tasks.

This view is supported by Structural Family
Theory. According to this approach, the family is a
highly complex multi-individual system but the members
are themselves subsystems of larger units—the extended
family, the block, the society as a whole. The ability
of the family members to function well and keep the
boundaries fluid and clear depends on the interaction and
family flexibility to negotiate differences, roles, and
tasks and make the appropriate shifts according to family
members' ages, functions, and developmental stages. In
terms of parental roles and tasks during this
developmental milestone, Minuchin (1974) also stresses
the importance of the fathers' and the mothers' 
flexibility and accommodation with children, especially
during adolescence demands and needs. This open
communication and flexibility between parents and adolescents reduces the risk of teenagers to get involved in drugs (Anderson & Henry, 1994).

These results may also reflect the typical Hispanic family system, which allows space for extended family members as a part of family relationships such as cousins, aunts, uncles, and grandparents (Bartle & Sabatelli, 1989; Canino & Canino, 1980). According to Madsen (1964) these traditional families reveal flexible and fluid boundaries which include all family members such as grandparents, cousins, aunts, uncles, and other relatives.

The Activity Level of the Father in the sons' drawings may also indicate the trend of sons in the Hispanic family to identify with the father's role as they move toward maturity. Although in the Hispanic family functioning the father is generally depicted in the literature as more distant than the mother from the children, the sons, in general, follow the father's traditional role, and are allowed more freedom, independence, and authority than females in their socialization and growing up process (Canino & Canino, 1980; Carrillo, 1982).

Thus, it appears that the number of Human Figures and the Activity Level of Father are important factors to consider in the evaluation of the son's perceptions of family flexibility on the Hispanic families' KFD profiles.
Hypothesis 5

There is no significant multiple correlation between a linear combination to the KFD family boundaries and the FACE II Cohesion scale.

This hypothesis was tested separately for various subgroups using regression analysis. For sons there was no significant relationship between the KFD family boundaries variables and the FACES II Cohesion scale. The null hypothesis was retained for sons. For mothers, parents, daughters, and children, however, the null hypothesis was rejected.

The regression analysis indicated that mothers who see the family as more Cohesive in their drawings show more appropriate and clear Generational Boundaries and a more Cooperative Mother. Results also indicate that parents who view the family as more Cohesive draw pictures showing Mother and Father Turned Toward Each Other and a more Cooperative Child.

Further, the regression analysis showed that daughters who see the family as more Cohesive, draw pictures showing a more Nurturing Mother and a more Cooperative Father. And, finally, results indicate that children who see the family as more Cohesive draw pictures showing Mother and Father Facing Each Other and a more Cooperative Mother.

Discussion. According to Olson et al. (1992) the
Family Cohesion scale assesses the degree to which family members are separated from or connected to their family. Within this scale, specific concepts are used to diagnose and measure the cohesion dimension such as emotional bonding, boundaries, coalition, time, space, friends, decision-making, interest, and recreation.

He also associates cohesion to disengagement and enmeshment. Disengaged (very low cohesion) is characterized by low emotional bonding, closed internal boundaries, open external boundaries, rigid generational boundaries, and a general sense of separateness. Enmeshment (very high cohesion) is characterized by high emotional bonding, high dependence among family members, closed external and open internal boundaries, parent-child coalitions, and a general sense of oneness (Olson et al., 1979).

According to Perosa and Perosa (1990), the Olson's scale of Cohesion correlates highly with the SFIS-R Enmeshment/Disengagement scale which theoretically refers to boundaries differentiation between subsystems as well as resonance (sensitivity) of family members to one another. They found that both scales appear to be assessing Cohesion. Therefore, Olson's Cohesion scale offers additional information that can be used in the evaluation of family boundaries on KFDs.

In general, these results are consistent with Olson et al.'s (1992) Circumplex Model and FACES II
family theory, as well as with Minuchin's (1974) approach. The structural model sees the family as living systems that operate through transactional patterns and differentiates and carries out its functions through subsystems or family members. In order for a family to function satisfactorily, family interactions must be adequate to and be characterized by cohesion. Children negotiate, cooperate, and compete. Parents offer nurturance, guidance, and support. Spouses, as a cohesive unit, work together, talking to each other and giving each other emotional support and mutual accommodation.

These results also are supported by the literature which indicated the relationship between some of these findings and the ability to prevent adolescents' substance abuse. Family factors such as the degree of parental nurturance and support, parent-child communications, and quality of the parents' marriage have been found repeatedly to discriminate substance-abusing adolescents from nonsubstance-abusing adolescents (Barnes, 1984; Coombs & Landsverk, 1988; Glynn & Haenlein, 1988; Simcha-Fagan et al., 1986; Stanton, 1985). It was reported that family Cohesion (or family bonding) and Nurturance and support were negatively related to substance abuse in adolescents (Barnes, 1984; Coombs et al., 1988; Sincha-Fagan et al., 1986; Steinglass, 1984; Volk et al., 1989). Other factors also
have been negatively associated with teenagers' substance abuse, such as positive and warm relationship between parents and child, parental modeling, clear and consistent limits and rules (boundaries), and parental praise and encouragement (Brook et al., 1988; Coombs & Paulson, 1988; Glynn & Haenlein, 1988; Gorsuck & Butler, 1976; Kandel, 1982; Kandel et al., 1978).

Thus, results of regression analysis indicated that Family Cohesion is associated with clear Generational Boundaries, Mother Cooperation, Child Cooperation, Father and Mother Turned Toward Each Other, and Father and Mother Facing Each Other.

**Hypothesis 6**

There is no significant correlation between a linear combination of the KFD Family Adaptability variable and the FACES II Adaptability scale.

This hypothesis was tested separately for various subgroups using regression analysis. For parents and sons there were no significant relationships between the KFD family adaptability variables and the FACES II adaptability variables. The null hypothesis was retained. For mothers, daughters, and children, however, the null hypothesis was rejected.

This regression analysis indicated that mother, who sees the family as more Adaptable, drew pictures showing fewer Sexual Characteristics and a greater
Activity Level of the Child. Results also indicated that daughters and children who view their families as more adaptable drew pictures showing greater Activity Level of the Father and a More Attractive Family To Live In.

**Discussion.** In general, these results are supported by Olson et al.'s model (1992). In his theory, family adaptability is defined as the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress. According to Olson et al. (1979), rigidity (very low adaptability) is characterized by authoritarian leadership, limited negotiation, and poor problem solving, role rigidity, and many strict rules. Chaotic families (very high adaptability) are characterized as possessing unclear leadership, very lenient discipline, endless negotiation, poor problem-solving, and rule and role shifts.

Minuchin's (1974) view of the Family Adaptability is similar. This construct is concerned with the degree to which family members are able to adapt and change in response to stress, conflicts, and developmental stages. Parents and children must be able to adapt when circumstances change, so they can grow while the family system maintains continuity.

Hispanic American families and their extended networks have remained flexible and adaptive (Vega,
The Hispanic American family is a flexible institution which adapts to changing environmental conditions. Studies on immigration and social network attest to the structural flexibility of families and their instrumental role in the United States (Vega et al., 1983).

The results of this hypothesis also show a significant difference in the Sexual Characteristics variable. It appears that non-clinic mothers showed less Sexual Characteristics than the clinic mothers. The Sexual Differentiation Score measures the number of sexuality distinguishing features among father, mother, and child figures. Theoretically it is thought to reflect the extent to which sex differences, sexuality, and autonomy are acknowledged in the family (Schwartz, 1981; Thompson, 1975).

It looks like non-clinic mothers suggest less comfort and acknowledgment of sexuality than the clinic mothers due to traditional roles where Hispanic families restrict daughters' sexuality more than Anglo families (Soto, 1983). The area of Hispanic family sexuality, however, remains virtually unexamined among different racial/ethnic Hispanic groups (Hurtado, 1995).

In contrast, clinic mothers acknowledge more Sexuality because the spousal relationship in families with substance-abusing adolescents is characterized by serious difficulties in intimacy, and more specifically,
by sexual conflicts (Kirschenbaum et al., 1974). In addition, Stanton et al. (1982) indicated that drugs produced a kind of sexual experience, which would particularly explain the colorful eroticized language and loving tenderness that addicts attach to various aspects of their habit. Through it they can have a quasi-sexual experience without being disloyal to their family, and, most obviously, their mother. They do not have to form a heterosexual relationship but can relate sexually to the drug instead.

Thus, Family Adaptability is associated with the Level of Father Activity, less Sexual Characteristics, and a Family More Attractive To Live In.

**Hypothesis 7**

There is no significant difference between the mean scores of clinic and non-clinic subjects on each of the separate SFIS-R variables.

This hypothesis was tested by t-test for means of two independent samples. For sons there was no significant relationship between the mean scores of clinic and non-clinic subjects on each of the separate SFIS-R variables. For fathers, mothers, parents, daughters, and children the null hypothesis was rejected.

The t-test analysis indicated that non-clinic fathers and mothers rate the family as more Enmeshed than clinic fathers, and mothers and fathers see more Parent
Coalition. Results for daughters indicated the non-clinic daughters are significantly higher than clinic daughters on Parent Coalition, Father-Child Cohesion, Mother-Child Cohesion, and Spouse Conflict Resolved. For children, results indicated that non-clinic children score higher than the clinic children in the Parent-Coalition variables, Father-Child Cohesion variable, and Spouse Conflict Resolved variable.

Discussion. The literature has described the structure and functioning of families with substance-abusing adolescents as being a dysfunctional system, rigidly enmeshed, with blurred generational boundaries, a symbiotic mother-child relationship and a lack of conflict resolution (Anderson & Henry, 1994; Bartle & Sabatelli, 1989; Cleveland, 1981; Joanning et al., 1984; Kaufman, 1981, 1986; Levine, 1985; and Volk et al., 1989).

In Minuchin's model (1974; Minuchen et al., 1975) the psychosomatic family is characterized by enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. The enmeshment is indicated by a high degree of intrusion on personal boundaries, by poor differentiation of the family members, and by confused executive hierarchies. In this model, the child plays an important role in the family to perpetuate conflict avoidance and keeping the balance.
In general, these results are consistent with other results on the present study as well as with the structural family model of a well functioning family. The picture reflects an enmeshed family, with a clear father-mother coalition, a proper parents-children coalition, and a spouse subsystem with conflict resolution. In addition, it shows a father-child and mother-child with proper cohesion or emotional bonding between them.

The average well-functioning Hispanic families meet this description. According to Falicov (1982), five characteristics explain Hispanic families' interactions: (1) interdependence among members; (2) high level of togetherness and cohesion; (3) well-defined hierarchical organization; (4) loyalty among members of the same and other generations; and (5) family group identity where loyalty is more important than autonomy and independence.

These results, however, appear to describe the father figure in a cohesive or emotional bonding relationship with the children rather than distant and absent as reported in the literature (Canino & Canino, 1980; Carrillo, 1982; Falicov, 1982). Results of this study seem to portray the father as closer to the family and as being flexible. These findings raise two issues: One, the possibility that the participants tried to idealize and "protect" the father role; two, the lack of enough parents in the sample may affect this view. More
studies are needed to determine if the father role is changing in the American families.

Thus, non-clinic families differed from clinic families in terms of Parent Coalition, Father-Child Cohesion, Mother-Child Cohesion, Spouse Conflict Resolved, and Enmeshment. Non-clinic families scored higher than clinic families on these variables using t-test analysis.

Hypothesis 8

There is no significant difference between the mean scores for clinic and non-clinic subjects for each of the 37 KFD variables.

This hypothesis was tested by t-test for means of two independent samples. For fathers, mothers, parents, sons, and daughters the null hypothesis was rejected. There is a significant difference between the mean scores for clinic and non-clinic subjects for each of the 37 KFD variables.

The t-test analysis indicated that fathers included significantly more Human Figures in the drawings than clinic fathers. Non-clinic mothers scored significantly higher than clinic mothers on the Vertical Displacement of Fathers, General Boundaries, Cooperation Mother, Activity Level of the Father, Activity Level of Mother, and Activity Level of the Child. Sons' results indicated that the clinic sons scored significantly
higher than the non-clinic sons on Nurturing Child. The clinic daughters' results also indicated that the clinic daughters scored significantly higher than the non-clinic on Size of the Mother and Size of the Child.

Non-clinic daughters, however, scored higher than clinic daughters on Distance between the Mother and the Child, Cooperation of Father and Cooperation of Mother on Activity Level of the Father, and Activity Level of the Mother, on General Impression of Family Satisfaction, and on the Number of Human Figures.

Discussion. The results of this hypothesis indicate that clinic daughters drew a larger figure of the mother and the child than non-clinic daughters. The literature has indicated that Sizes of figures reflect levels of importance, authority or power status achieved within the hierarchy of the family structure (Annunziata, 1984; Bing, 1970; Deren, 1975; Gardano, 1988; Isaacs & Levin, 1984; Koppitz, 1968; Ledesma, 1979; Schwartz, 1981; Thompson, 1975).

According to Gardano (1988), Sizes of the figures, as a scoring measure, is a strong indicator of group differences in the KFD. Her results indicated the Size of the Mother figure was significant in differentiating between experimental and control groups. However, she was not able to confirm her hypothesis that in the experimental group the mother and child figures
were taller than the father figure. Schwartz (1981), using vertical displacement variables in her study, was not able to discriminate between psychosomatic and normal families.

Interpretation that can be drawn from these results of the analysis with sizes of figures suggests that mothers and child in the clinic group are playing a greater role of importance and power in the family system than in the non-clinic group, as viewed by the daughters. This placement and closeness of the mother and child relative to family functioning in substance-abusing families appear to give some confirmation to the structural theory concept of the role of the mother-child in psychosomatic families as a means of maintaining family stability or homeostasis (Minuchin, 1974; Minuchin et al., 1975).

In the substance abuse literature, generally, the mother and child are described as maintaining a close relationship of power role reversal within the family system, which operates against the other parent. The child plays an important role in the parent's conflict avoidance and becomes the only cause around which parents remain together. Thus, as Coleman and Stanton (1978) and Stanton (1977) indicated in their studies with substance-abusing families, the IP child "rescues" the family. He is a "savior" of the family's pain and suffering; he is a "martyr" who will take the family's worst with him when
he leaves. If he dies, then his death is a noble one.

The results of the present study do not show any significant parent-child coalition in the statistical analysis. However, this difference (means) in terms of sizes and distance between the mother-child in the clinic and non-clinic group may indicate, in structural terms, that the mother and the child are playing a power position role in a family structure. The mother and the child are much closer in the clinic group than the mother-child in the non-clinic group.

In addition, the t-test results indicate that the clinic sons scored significantly higher than the non-clinic sons on Nurturing Child. Although sons' variable was rejected tentatively because only 1 significant variable out of 37 is less than could be expected by change, still the results suggest that he/she is playing a Nurturing role within the family. Substance-abusing adolescents are described as maintaining a close emotional (nurturing) relationship with one of the parents or both (Alexander & Dibb, 1975, 1977).

Stanton (1977) was one of the first observers to quantify the heroin addict's frequent involvement with the family. Noon and Reddig (1976) found that the majority of drug abusers maintained close ties with the families of origin years after they had "apparently" left home. Paradoxically, the drug permits the adolescents to be simultaneously both close and distant, "in" and "out,"
attached and detached. The substance-abusing adolescents lives in a condition of pseudo-individuation or pseudo-independent behavior. These results are consistent with other hypothesis findings in the present study.

These results open the clinical possibility of exploring in structural family assessment the importance of the Size of the Mother and Child, and the Distance between the Mother and Child, as indicators of group differences between families with substance abuse adolescents and families with drug-free adolescents in terms of the mother-child role in family functioning. However, it is not clear if the Hispanic traditional view of the role of the father and the mother in the family may have an influence on these results. Cultural factors need to be considered in clinical assessment and diagnosis. Nonetheless, these results show a clear difference between the clinic and non-clinic groups.

The t-test analysis for daughters also identifies some variables that differentiate clinic from non-clinic groups. Non-clinic daughters indicate greater Cooperation of the Father and the Mother and greater Activity Level of the Father than the clinical daughters. In addition, the non-clinic daughters considered the Family a Better Place To Live In and tended to place more Human Figures on the pictures than the clinic daughters. These results are consistent with the overall results of the present study.
Thus, results identify the following KFD variables on the drawings and are able to differentiate non-clinic successful families from unsuccessful clinic families: higher Father Vertical Displacement, clear Generational Boundaries, a more Cooperative Mother, higher Distance between the Mother and the Child, Activity Level of the Father, Activity Level of the Mother, positive Impression of the Family, and the Number of Human Figures. In addition, clinic sons scored higher on Nurturing Child, and daughters also scored significantly higher on Size of the Mother and Size of the Child.

Hypothesis 9

There is no significant difference between the mean scores of clinic and non-clinic subjects for the FACES II Cohesion and Adaptability variables.

This hypothesis was tested by $t$-test for means of two independent samples. For sons the null hypothesis was retained. There was no significant difference between the mean scores of clinic and non-clinic subjects for the FACES II Cohesion and Adaptability variables. For fathers, mothers, and daughters, however, the null hypothesis was rejected.

The $t$-test analysis indicated that non-clinic fathers, mothers, and daughters scored higher in Cohesion than the clinic families.
Discussion. These results indicated that in the non-clinic group, fathers, mothers, and daughters rate higher in Cohesion than fathers, mothers, and daughters in the clinic group. Cohesion assesses the degree to which family members are separated from or connected to their family (Olson et al., 1992). According to Moos (1974), Cohesion relates to members' concern and commitment to the family as well as to the degree of mutual support.

Minuchin (1974) conceives of all families as falling somewhere along a continuum whose poles are the extremes of diffuse boundaries and overly rigid boundaries. Both extremes of enmeshment and disengagement indicate areas of potential pathology. There is a midpoint (clear boundaries) that allows for adequate communication, interaction, and cohesion, while allowing subsystems and family members to retain adequate differentiation and separateness. This notion of clarity of boundaries within the family structure is one of the most important concepts of structural theory for differentiating functional and dysfunctional families in the assessment process.

These findings also are confirmed by the literature that related dysfunctional families with a lack of cohesion. Kaufman's (1981) study of the effect of drug abuse on the family system found that mothers tended to be enmeshed with addict children in all ethnic
groups, including Hispanics. West et al.'s 1987 study with 35 families suggested that these families are highly interdependent with fear of separation and individuation.

Florez-Ortiz and Bernal (1990), based on their clinical experience with Hispanic families with substance abuse adolescents, also reported that these families are enmeshed with a mother-child overinvolvement. Friedman et al. (1987), however, using FACES II to conduct a study with 96 drug-abusing adolescents and their families, reported different results. The majority of these families categorized themselves as "disengaged" (rather than enmeshed) on the cohesion, and as rigid (rather than chaotic) on the adaptability dimension.

According to this analysis, the non-clinic Hispanic American families show a more cohesive and midpoint functioning, along the Olson and Minuchin's concepts, than the clinic families.

**Hypothesis 10**

There is no linear combination of the KFD family hierarchy variables which significantly discriminates between the clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For parents the results indicated that the KFD drawings of non-clinic parents, compared to those of clinic parents, show the father higher in the picture, but smaller in Size, mother
larger in Size, and child higher in the picture. Results for children indicated that the KFD drawings of the non-clinic children, compared to those of clinic children, showed that non-clinic children tend to draw mothers larger in Size than the others.

**Discussion.** Using discriminant analysis to identify the specific variables that differentiate clinic families from non-clinic families in terms of hierarchies, the results revealed that three variables significantly distinguished between both groups. The non-clinic parents are placed higher in the drawings, but small in Size. Mother Size is drawn larger, and child is higher in the picture, as seen by parents. Non-clinic children also tended to draw mother Size larger than the others.

These results raise several issues.

First, it is important to reiterate that the present study did not show any significant Hierarchical role reversal or coalitions between one parent and the child. Hypothesis #1 also provides clues about clear parent-coalition as managers of the household.

The higher placement of the father and the child in the drawings appears to be more related to adolescents' identification role and tasks in both male and female than any faulty alliance. In the Hispanic families, the mother-son and the father-daughter
relationships have an affectionate bond. The sons, however, identified with the father's role (Falicov, 1982).

Second, in terms of group discrimination, results indicate a difference between the clinic and non-clinic groups in the Father and Child Higher Placement and small Size of the father and the larger mother Size on the drawings, as seen by parents and daughters. The placement and Size of the Father and the Size of the Mother have not been studied as a factor of discrimination and evaluation of KFDs with clinical and non-clinical substance abuse families in order to make comparisons. One may speculate, at this point, that parents and daughters reveal a significant difference between clinic and non-clinic families relative to Height and Size. More studies are needed to determine whether or not this factor should be taken into consideration.

And, third, it is also important to indicate that this study did not take into account socioeconomic status factors and developmental levels that could influence the interpretation of drawings (Ledesma, 1979; Thompson, 1975). Results seem to reflect, however, the traditional portrayal of the Hispanic families' functioning. The Father Placement and the Mother Size appear to be related to the father as the leader and authority (Higher Placement) and the mother as playing a major role in her family involvement and transactions (Larger Size).
Thus, results indicate that the KFD drawings, non-clinic parents, compared to those of clinic parents, showed the Father Higher in the picture, but small in Size, and the Child Higher in the picture. Non-clinic daughters tended to draw Mothers larger in Size than the clinic daughters.

**Hypothesis 11**

There is no linear combination of the KFD subsystem variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 df for the test of the resulting Chi-square. The Chi-square and p show that discriminant analysis is significant for none of the subgroups.

**Discussion.** This lack of results with the KFD subsystems variables in this hypothesis is consistent with results of Hypothesis #2 and #14. It appears that KFD subsystems variables, at this time, cannot be used as an accurate measure of family types of faulty alignments. This is also consistent with the overall results of the present study.

These results are similar to Gardano's (1988) findings. Using the KFD in her study, she was not able to identify subsystems or subgroup patterns that could
differentiate her experimental and control group. Schwartz (1981), also using the KFD in her study with psychosomatic and normal families, reported a very weak trend in the direction of the hypothesis related to triangulations and coalition in the family subsystems.

**Hypothesis 12**

There is no linear combination of the KFD family boundaries variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for mothers, parents, daughters, and children. Results indicate for mothers that a family drawing with more Cooperative Mothers and more clear Generational Boundaries is more likely to be drawn by a non-clinic mother than a clinic mother. Results indicate for parents that a family drawing with a more Cooperative Mother, more clear Generational Boundaries, and more Individual Features is likely to be drawn by a non-clinic parent than a clinic parent.

For daughters, results indicate that a family drawing showing a more Cooperative Father, more Nurturing Mother, less Nurturing Child, less Different Positions or Activities Together, more Mother-child Orientation facing each other, more Father-child Orientation facing each other is likely to be drawn by a non-clinic daughter than a clinic daughter.
**Discussion.** These findings also corroborate the distinction between the clinic and non-clinic families. Discriminant analysis indicated that on one hand, non-clinic mothers, parents, daughters, and children showed a more positive pattern of interaction among family members than the clinic group. They revealed family transaction of a more Cooperative Mother, a more Cooperative Father, a more Nurturing Mother, more clear Generational Boundaries, more Individual Features, Boundaries, more Mother-Child Orientation facing each other, and more Father-Child Orientation facing each other. Thus it appears that these variables for each figure are important factors to consider in the discrimination and evaluation of KFDs.

On the other hand, the results of discriminant analysis between both groups suggest a negative relationship for parents, daughters, and children in two variables. Fewer Different Positions or Activities Together and a less Nurturing Child are more likely to be drawn by non-clinic children and daughters than clinic children and daughters.

The differentiation score variable includes the sum of the variables individual features, different positions, general boundaries, and gender differences. These results showed only two variables that are in discriminant analysis significant: individual positions and different positions. The differentiation scale
measures the number of features or characteristics which
distinguish KFD figures from each other. Theoretically, it is thought to reflect individual differences of people represented in the drawings (Schwartz, 1981).

According to Minuchin (1974) and Minuchin et al. (1967), enmeshment precludes autonomy, and disengagement precludes interdependence and differentiation. Psychosomatic enmeshed-rigid families are less differentiated than families characterized by a relating style of close connections between family members. Families with substance-abusing adolescents display a high degree of involvement, particularly between the mother and the child, because of unresolved family conflicts. Generally, parents are disengaged.

This condition sets off a chain of shifting reactions and alliances within the whole families resulting in less Individual Features or undifferentiated families. The lack of differentiation with Families with substance-abusing adolescents results in fewer distinguishing characteristics between parent(s) and the child in contrast with non-clinic families, which showed more differentiation.

The Hispanic family has been described as enmeshed and very involved (Falicov, 1982). This close involvement is considered as a part of the Hispanic familism, a condition of strong identification, attachment, dependence, and mutual support (Hernandez,
A number of authors, however, have argued that familism appears to help Hispanic families in coping with new circumstances of stress and forms a natural support system which also facilitates strength and growth (Falicov, 1982; Soriano, 1995; Vega, 1995).

The results of this hypothesis also indicated that in the non-clinic families, as seen by the daughters, the child is less Nurturing and the family showed less Different Positions, or Activities Together. In terms of Nurturing, children should seek Nurturance from their parent rather than Nurturing them. If a child begins to take an intense Nurturing role vis-a-vis parent(s), this would indicate a role reversal in the Hierarchy distribution of power with respect to age, role, and function.

Daughters perceived the family with less Different Positions or Activities, a variable related to Hispanic family differentiation. In this scale, the lower the score, the less differentiated the family is. These results confirm the overall findings of the present study describing the Hispanic families' greater orientation to group identity, than autonomy and independence (Falicov, 1982). This close involvement or Enmeshment is part of the Hispanic familism, another Family-Centered cultural value.

In addition, the daughter's perception of lesser
family members' differentiation may provide enlightenment about the Hispanic American Adolescents' process of maturation and individuation. The results of the qualitative analysis of the family drawings appear to indicate that Hispanic female adolescents, more than males, are dealing with different degrees of differentiation or identity issues as they move up to the late teenage years.

The qualitative information of this study showed that non-clinic females 12 to 16 years old drew themselves 62.5% bigger in Size, and 37.5% smaller in Size. Sixteen- to 20-year-olds drew themselves 30.7% bigger in Size, and 69.3% smaller in Size. This tendency (%) of the females to draw Small Self Figure (relative to other figures in the drawings) as they mature in age is also reflected in the clinic adolescent females, although with lower percentages in both age groups. The adolescent males in the non-clinic group, in contrast, drew themselves Bigger than Smaller (%) in both age groups of 12 to 16 and 16 to 20. In the clinic group, however, adolescent males drew themselves Smaller rather than Bigger (%) in both groups, but with a higher rate (%) of Smaller figures among the group of 16- to 20-year-olds.

The essential task of adolescents is the formation of an independent identity, which requires the adolescent to become less dependent on the parents,
develop a sexual identity, develop peer relationships, and derive security from a growing mature self and the environment (Slaff, 1979). The findings of this study relative to Hispanic adolescents' developmental processes appear to confirm Minuchin's (1974) view that Family Enmeshment precludes adolescents' process of autonomy. In general, the Hispanic adolescent male and female participants in this study appear to give more importance to family group identity than to their own autonomy.

This raises the issue of the relationship between strong family members' attachment and the adolescents' ability to master the appropriate development task of identity and self-concept. Further research with the KFD, however, is necessary in this area in order to better understand the role of the developmental processes among Hispanic American adolescents growing up in families with different degrees of involvement.

Hypothesis 13

There is no linear combination of the KFD family adaptability variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. Results indicate that a drawing showing a more Active Child, more Active Mother, and a Family more Attractive to Live In is more likely to be drawn by a non-clinic than a clinic.
mother. Results indicate for non-clinic parents that a drawing showing a more Active Child, a family more Attractive to Live In, and more Human Figures is more likely to be drawn by a non-clinic than a clinic parent.

For non-clinic daughters, results indicate that a drawing showing a more Active Child, and Family more Attractive to Live In, and more Human Figures is more likely to be drawn by a non-clinic than a clinic parent. And, for non-clinic children, results indicate that a drawing showing greater Activity Level of Fathers and Mothers and a Family more Attractive to Live In is more likely to be drawn by non-clinic children than by clinic children.

Discussion. These results identify some important differences between the clinic and non-clinic group. Differences were found in mother's perceptions showing a more Active Child, a more Active Self, and a Family More Attractive To Live In; in parents' perceptions showing a more Active Child and more Human Figures; in daughter's perceptions showing a more Attractive Family To Live In, more Human Figures, greater Activity Level of the Mother, and greater Activity Level of the Father; and, in children's perceptions showing greater Activity Level of Father and Mother, and a Family More Attractive To Live In. Thus, non-clinic participants revealed more positive family interaction
patterns, dynamics, and environment than the clinic group. These results are consistent with the general findings of this study.

These findings are also associated with Minuchin's (1974) description of the two systems of constraints which maintain the structural dimensions of the family functioning. The first is generic, involving the universal rules governing family system, organization, functions, and power. For instance, there must be a power hierarchy, in which parents and children have different levels of authority. There must also be a complement of roles and tasks, with the father and mother operating as a team.

The second system of family constraint is idiosyncratic, involving the mutual expectations of family members. These expectations come from years of explicit negotiations among family members, often around daily events. Frequently the nature of this original transaction is forgotten, but the patterns remain as a matter of mutual accommodation and functional effectiveness. Thus the system maintains itself. If the structural family system does not resist change, alternative patterns are available within the system for people to accommodate kaleidoscopically and attain mutuality and fulfillment.

The findings of this hypothesis also are partially confirmed by Schumm et al. (1988). Their study examined family satisfaction among intact families both
rural and urban in 14 states. Generally, they found that both Hispanic parents and their adolescent family members were more satisfied with their family life than their non-Hispanic White counterparts.

Thus, results indicate that drawings which show a more Active Father, more Active Mother, more Active Child, more Human Figures, and family more Attractive To Live In are more likely to be drawn by non-clinic mothers, parents, daughters, and children than by clinic mothers, parents, daughters, and children.

Hypothesis 14

There is no linear combination of the eight SFIS-R variables which significantly discriminates between clinic and non-clinic samples.

This hypothesis was tested by discriminant analysis for various subgroups of subjects. For each subgroup there was one discriminant function, and 6 df for the test of the resulting Chi-square.

The Chi-square and p show that there is no significant discrimination for any of the subgroups: mothers, parents, sons, daughters, or children.

Discussion. The SFIS-R questionnaire appears to be a reliable instrument in the present study. The results indicate that Perosa's instrument was able to confirm the validity of some of the KFD variables as
shown in Hypothesis #1 and to identify some differences between the clinic and non-clinic families in Hypothesis #7. In the discriminant analysis of this hypothesis, however, there is no significant difference between both groups for any of the subgroups.

The results of the SFIS-R may reflect the participants' conditions and attitudes. First of all, the level of literacy and education among the participants must be made clear. Every effort was made to ensure accuracy in the testing process. All the participants were given the choice to use the English or Spanish versions of the instruments. In addition, they were advised to ask for clarification if they did not understand something. All this was done with carefulness in each case; however, due to the widespread variability existing among the participants because of socioeconomic and educational background, we may expect some effects in the test-taking approach.

Second, this test-taking attitude seems to be reflected also on the sons' participation. Overall, this study is lacking in significant findings in terms of sons' perceptions about family functioning. It is my opinion that this is due to a lack of interest and motivation of the subjects, particularly substance-abusing male adolescents in treatment. Most of them did cooperate but with moderate interest. Females showed, in general, more motivation.
Third, original hopes of using two-parent families were not fulfilled. Most of the families with a substance-abusing adolescent were divided, separated, and fragmented as a family. Sometimes the father was available, other times it was the mother. A few times neither of them came, only the adolescents. Very few times both came together. Fathers, particularly, were more reluctant and unavailable to support this study as we can see in the demographic information.

Overall, the present study results appear to confirm the usefulness of Perosa's Instrument to measure Minuchin's Structural Family Constructs in KFD Family Drawings. Further research using the SFIS-R with a larger sample of two-parent families, however, is recommended in order to compare results. In addition, this study also can confirm the validity of the FACES II to measure some of the Cohesion and Adaptability variables in the KFD drawings. In comparison, the results of the SFIS-R and FACES II, according to the KFD variables, are similar in meaning using the framework of Structural Family Theory.

Conclusions

From an analysis of the findings, the following conclusions were drawn:

The first research question asked: Is the KFD a valid instrument for assessing the structural concepts of
family functioning of Hispanic American families
generated validity data which would
increase the usefulness of the Kinetic Family Drawings as
an instrument suitable to measure Minuchin's Structural
Family concepts in the family drawings, this study tested
six hypotheses all related to the first research
question.

The results of this study give support to the
usefulness of the KFD in assessing some variables of the
Structural Dimensions of the Hispanic Family Functioning.
Of 37 KFD variables designed for this study, 25 (67.5%) found statistical confirmation as they related to SFIS-R
and FACES II instruments and also as the results were
compared to other studies from the related literature.

In general, the Kinetic Family Drawings appear
suitable to identify the proper authority distribution in
the family structure such as parent-coalition vs. parent-
child coalition. The results of this study indicate that
the placement of child figures in the family drawing, in
relationship with the parents figures, is associated with
mother-father coalition as a team in the household
management. The results indicate that the higher the son
and the children place themselves in the family drawings,
the greater the coalition between the parents.

This study did not provide significant
information for assessing family faulty alignments such
as coalitions, triangulations, and detouring among the Family Subsystem interactions. The quantitative results of this study give limited support to the use of the KFD as a projective test for assessing Subsystem Maladaptive Patterns of Interaction in Family Structure. The qualitative analysis, however, did show a few family drawing cases that appear to be related to a Parent-Child Coalition within the Family System.

The results of this study also offered support for KFD variables related to Enmeshment and Cohesiveness. In assessing family interactions the therapist concentrates on various facets of the boundaries. The notion of clarity of the boundaries is the most important concept used by Minuchin to evaluate structural family functioning.

The results of this study also offered support for KFD Boundaries variables related to Enmeshment and Cohesion dimensions. Family Enmeshment in non-clinic families is indicated in KFD family drawings by Mother and Child Cooperation, as seen by mothers, parents, and children. In the clinic group, however, family problems are associated with an enmeshment-rigidity condition described very well in Minuchin's Psychosomatic Model of dysfunctional families. In this study, results show this closeness-rigid family interaction condition is indicated in the KFD by the Distance between the Mother-Father, Father-Child, Mother-Child, and by the Cooperation of the
Child figure in the drawings, as seen by parents and daughters. As the Distance increases between the family figures, so the Enmeshment-Rigid patterns of isolation and separatedness appear within the Family Structural System.

In terms of Family Cohesion, the results of this study indicated, based on FACES II, that Family Cohesion is represented in the KFD family drawings by clear Generational Boundaries between family members, by a Cooperative Mother, a Cooperative Father, a Nurturing Mother, and by a Mother-Father facing each other, as seen by mothers, parents, daughters, and children. The more intensity, the greater the Family Cohesion.

With regard to Family Adaptability, the results of this study identify the following variables related to non-clinic Family Flexibility: number of Human Figures as seen by parents, Activity Level of the Father as seen by sons, less Sexual Characteristics as seen by the Mother, and a More Attractive Family To Live In, as seen by children.

The second research question asked: Are there differences in the perceptions of Structural Concepts of Family Functioning among Hispanic American families with substance-abusing or nonsubstance-abusing adolescents as revealed in the Kinetic Family Drawing and their scores on the Structural Family Interaction Scale-Revised (SFIS-R) and the Cohesion and Adaptability Scales of FACES II?
The KFD's ability to discriminate families with different styles of interacting is affirmed by this study. The results indicate that the KFD is able to differentiate family patterns of interaction between substance abuse and nonsubstance abuse families under certain conditions. The clinic and non-clinic groups were compared using the KFD, SFIS-R, and FACES II instruments. The eight hypotheses were tested using $t$-test for hypotheses 7, 8, and 9, and discriminant analysis for hypotheses 10, 11, 12, 13, and 14.

This study shows that when comparing Hispanic American families with substance-abusing adolescents to Hispanic families with nonsubstance-abusing adolescents, they differed in terms of specific variables. In the Hierarchical dimensions, non-clinic families were more likely than the clinic families to have a proper Father-Mother Coalition and show more Distance between the Mother and the Child. Thus, findings are related to a regular power distribution within the Hispanic American families.

In the Boundary dimensions, non-clinic Hispanic families were more likely than clinic Hispanic families to display more Father-Child Cohesion, more Mother-Child Cohesion, more Mother-Daughter Cohesion, more Individual Features, less Different Positions, more clear General Boundaries, more Orientation Father-Child facing each other, more Orientation Mother-Child facing each other,
more Nurturing Mother, less Nurturing Child, more Cooperation Mother, more Cooperation Father, and more Family Enmeshment.

Thus, findings indicate that non-clinic Hispanic American families, compared to the clinic group, show more clear Generational Boundaries between family members, reflect more Cohesive, Cooperative, and Family affection patterns, more family overinvolvement, and better communication between the parents and the child.

In the Adaptability dimension, the non-clinic Hispanic families were more likely than clinic families to show more Spouse Conflict Resolution, more Activity Level of the Father, more Activity Level of the Mother, more Activity Level of the Child, more number of Human Figures, and a more Attractive Family To Live In. The daughters and sons, however, indicate that clinic families were more likely to show than the non-clinic families a Mother-Child close relationship and a Child and Son being more Nurturing in the family.

General factors emerging from these data appear to indicate that Family Patterns of Interactions such as the degree of Family Flexibility or Adaptability, Marital Conflict Resolution, Parental Leadership and Guidance, Parental Nurturance and Support, Family Cohesiveness, Quality of the Parent's Interactions, Open Communication between Parents and Children, and an Attractive Family Environment To Live In, discriminated between non-clinic
and clinic families in this study. Thus, non-clinic Hispanic American families with nonsubstance-abusing adolescents are more likely than Hispanic American Families with substance-abusing adolescents of showing, among other factors reported in this study, those conditions in family functioning.

These results are consistent with personal observations during my interviews with family members of both groups. Female and male adolescents indicated in clearly different ways that they are willing to refrain from or reject any involvement with substance abuse "gangs" if they found Ultimate Love, Understanding, and Support in their own family.

In summary, the quantitative and qualitative results of this study provide support for the potential of the Kinetic Family Drawing to reflect the drawer's view of himself/herself within the family, his/her view of family members' functioning, his/her view about some family interpersonal conflicts, and his/her view about the difference between some successful and unsuccessful family interactions in terms of Minuchin's Structural Family Concepts.

Recommendations

Based on the findings and conclusions of this study, recommendations are proposed in two areas: for practice and for further research.
Practice

1. The results of this study showed the usefulness of introducing the KFD into family evaluations and family interventions. Kinetic Family Drawings give the clinician an alternative way of observing family Structural Dimensions of Family Functioning. The KFD has proved in this study to be an accurate and nonthreatening approach of sharing perceptions, feelings, and concerns about family dynamics by parents and adolescents in the clinic and non-clinic group. The richer data about family dynamics and interaction patterns, however, come in this study from administering the KFD to all family members, and compared and contrasted all family members' drawings together in order to produce a tentative family schematization impression. Of 37 KFD variables designed for this study, 25 (67.5%) factors were found useful as an assessment measure of Structural Family Concepts.

2. This study also confirms that a system framework helps the researcher and the clinician to better understand the phenomenon of interactions and interdependency between family members, particularly dysfunctional families. The fact that therapists who are interested in behavior change can identify which aspects of family interactions (structures) are not working for the family, and change them into a more successful interaction pattern, is of significance to the family therapy assessment field. Data emerging from this study

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appear to agree with other studies about the usefulness of using Minuchin's Structural Family Concepts in family assessment and diagnosis.

3. This study showed that the constructs of Family Structure (interaction patterns) are useful because they allow the therapist to understand the family maladaptive or adaptive patterns of interaction using the KFD. The Kinetic Family Drawing, as a pictorial projective technique designed to elicit projective material, was found suitable to define some family structure variables in terms of four interrelated family functions: Family Hierarchy, Family Subsystems, Family Boundary, and Family Adaptability.

4. Perhaps the most surprising finding in this study is that structural factors related to Family Subsystem variables were not confirmed by the quantitative analysis of data in order to differentiate clinic and non-clinic families. None of the Family Subsystem factors were significantly different across the subsets variables analysis. Although the qualitative observations showed some family drawings with disturbed family alliances, caution is suggested in using the KFD as an evaluation measure to make inferences about family subsystem maladaptive patterns within the family functioning.

5. In addition, the clinician and therapist must view the KFDs and their interpretation in the context of
the participant's social and cultural background. This study consistently confirmed that the KFD does reflect the subjects' social-cultural identity and family functioning dynamics. Specifically, when assessing and interpreting the Hispanic American Family Functioning using the KFDs, the evaluator must keep in mind that the Family Power Distribution, Family Subsystem interactions, Family Boundaries degree of Cohesiveness, and Adaptability to new conditions are portrayed according to the strong Hispanic view of familism. This family-oriented perception may be different from other ethnic groups or cultures in terms of structural dimensions of family functioning.

Research

1. Given the implications that emanated from this research related to family assessment, there is a need to conduct similar studies with two-parent families in both clinic and non-clinic groups in order to compare the findings with the results of this study, and advance knowledge related to the validity of the KFD as an assessment measure of the Minuchin's Structural Family Concepts.

2. Given these findings, there is a need for further research to determine what valid role the KFD has as a projective technique able to elicit family interactions material, using Minuchin's Family Tasks,
System of Scoring, Family Diagnostic Interview, and his projective test of Family Apperception Technique (FIAT).

3. Further research is also needed with the KFD in the area of Hispanic American Families to study the similarities and differences between Hispanic American ethnic groups (or Hispanic American families vs. other cultural groups) in terms of Structural concepts such as family authority distribution, male/female roles, rules and functions, boundaries differentiation, and the impact of immigration, acculturation, and stress in the family structure and functioning.

4. There is also a need for further research with the KFD in the area of Hispanic adolescents in terms of developmental tasks to determine the relationship between the Hispanic orientation of familism and Togetherness (degree of Enmeshment) and the adolescent's (male and female) ability to master her/his identity and autonomy from their parents and family.

5. Further research with the KFD is needed in the area of Hispanic family sexual issues (masculinism/feminism; machismo/marianism; family sex schemas and genders roles for women and men; sexual identity, Hispanic family patterns of sexual and emotional abuse; etc.).

6. Given the awareness of the importance of language and cultural background in rendering mental health assessment, diagnosis, and treatment sensitive to
the Hispanic population, the results of this study and literature indicated the need for further research in the validation processes of psychological assessment of projective and non-projective tools suitable for the Hispanic Americans considering their cultural conceptions, experiences, and life views.

7. A final recommendation pertains to assessment instruments. Based on this study, FACES II proved to be a valid tool in the assessment of structural family concepts related to Cohesion, and Adaptation. The Hispanic version of the FACES II was very appropriate for the Hispanic participants' level as well as easy to administer and score.

This study also indicated that the SFIS-R is a valid and useful instrument for making judgments about factors related to family's Hierarchies, Boundaries, and Flexibility according to Minuchin's Model. This questionnaire, however, has some limitations in order to be used either on research studies or family evaluations and interventions with Hispanic populations similar to the present study participants.

First of all, the author(s) did not publish with the instrument a Manual with instructions related to the administration, intercorrelations scales, predicting interest patterns, scoring system, interpretations guidelines and applications for family therapy. Second, for scoring purposes, the data must be sent to the
office of the author(s) for interpretation purposes.

And, third, technical terms and length of the instrument did not help to maximize the Hispanic reader's level of understanding and completion of the inventory in the average predicted time.
APPENDIX A

INSTRUMENTS
INSTRUCTIONS

DRAW A PICTURE OF EVERYONE IN YOUR FAMILY, INCLUDING YOU, DOING SOMETHING, TRY TO DRAW WHOLE PEOPLE, NOT CARTOONS OR STICK PEOPLE. REMEMBER, MAKE EVERYONE DOING SOMETHING, SOMETHING KIND OF ACTION.
DIBUJOS KINÉTICOS DE LA FAMILIA (DKF)

Robert C. Burns y S. M. Kaufman

INSTRUCCIONES

Dibuje a cada persona de su familia, incluyéndose usted, HACIENDO ALGO. Trate de dibujar personas enteras, no use caricaturas, o figuras humanas de bocitos. Recuerde, dibuje a cada uno HACIENDO ALGO en algún tipo de actividad.
The Kinetic Family Drawing Inquiry Process

The inquiry phase occurs after the person has completed the KFD and after the counselor has taken the subject's pencil away. The inquiry process attempts to clarify the person's drawing and investigate the overt and covert processes which affected its production.

DATA RELATED TO THE DRAWING

1. For each figure in the drawing, ask the subject that person's name, relationship to the child, age, order of figure drawing and other meaningful characteristics or data.

QUESTIONS ABOUT THE DRAWING

2. what were you thinking about while you were drawing your family?

3. who is the leader (authority) in your family?

4. who makes the major decisions in your family?

5. How does the family members relate one with another?

6. To whom do you feel closer in your family?

7. When there are disagreements in your family, to whom do you go to find support and help?

8. Can you tell if in your family a child gets more attention from one parent than from the other?

9. Do you consider your family members to be to close or distant one from another?
10. In your home, are family members encouraged to make their own decisions and to act individually?

11. How do you describe the rules at home: very rigid, very flexible or very confuse?

12. How do you describe your family functioning (functional or dysfunctional)?

13. How do you like living in your family? (Check with x the best answer)
   - Definitely not
   - Probably not
   - Neutral
   - Probably
   - Definitely

14. Other comments about the family
PROCESO DE A CLARACIONES Y PREGUNTAS ACERCA DEL OKF

Esta fase de preguntas y aclaraciones tiene lugar después de que la persona ha completado el OKF y después de que el examinador ha retirado el lápiz. Esta fase tiene como propósito el clarificar el dibujo de la persona. En la sección A de este formulario, el entrevistador le pide al sujeto aclaraciones acerca del dibujo. En la sección B el entrevistador o el sujeto escribirá sus propias observaciones acerca de la familia dibujada.

A. Fase de aclaraciones del dibujo

1. Escriba en el dibujo, el lado de las figuras, el orden en que las dibujó, quienes son, cómo se llaman, que edad tienen y qué están haciendo cada uno.

B. Fase de preguntas

2. Puede indicarme en qué le hace pensar este dibujo de su familia?

3. Puede decirme quién es el líder (autoridad) en esta familia?

4. Quienes toman la mayor parte de las decisiones?

5. Cómo se relacionan los miembros de esta familia unos con otros?

6. Con quiénes se siente usted más cercano(a) y unido en su propia familia?

7. Cuando hay desacuerdos en su familia, a quién acude usted para encontrar apoyo y ayuda?
8. Puede indicarme si en su familia un hijo/a puede conseguir más atención y apoyo de unos de los padres que del otro?

9. Puede indicarme si en su hogar los miembros de su familia se protegen o cuidan excesivamente unos de otros (esp. padres con respecto a hijos)? (O están muy distanciados)

10. Se anima a los miembros de su familia a pensar y actuar en forma individual y tomar sus propias decisiones? (Individualización de los miembros/adolescentes)

11. Cómo describe usted las reglas de conducta en su propia familia—muy rígidas, muy flexibles, o muy confusas?

12. Cómo describe usted el funcionamiento de su familia? (relaciones, comunicación, resolviendo conflictos)

13. Cómo se siente usted viviendo en esta familia? Le gusta?

14. Otros comentarios finales de la persona relacionados con la familia (padres e hijos)
STRUCTURAL FAMILY INTERACTION SCALE-REVISED

Read each statement carefully. For each statement choose which is most characteristic of that statement as it describes your family and fill in A, B, C, or D on the corresponding item on the answer sheet.

A = Very true
B = More true than false
C = More false than true
D = Very false.

1. We are a very close family.

2. When parents disagree over something they try to get a child to take sides.

3. In our family father and a child don’t seem to be able to settle their differences satisfactorily.

4. We seldom talk about the things that are really bothering us.

5. In our family parents can talk over their differences and settle them fairly.

6. We think and act alike.

7. We easily change our way of doing things when we need to at home.

8. Mother and a child work out disagreements without hurting each other’s feelings.

9. Members of my family are encouraged to do things “their own way.”

10. We take an interest in each other’s activities and problems.

11. A child feels it is necessary to choose a side when parents have a disagreement.

12. We feel responsible for each other.

13. Father is not there when a child needs him.

14. We don’t talk over disagreements with each other.

15. Disagreements between parents can be discussed with both of them feeling their view was considered by the other.

16. Children find it easy to gain more privileges and responsibilities as they grow older.

17. In my family mother and a child can talk over differences and settle them fairly.

18. Family members feel guilty if we go our own way.

19. One or both parents is (are) extremely careful about protecting a child.
20. In our family we lack a feeling of togetherness.

21. A child feels trapped in between when parents argue.

22. Rather is too busy with his own life to give attention to a child.

23. When someone in our family tries to talk about a problem the other members avoid really talking about it.

24. When we try to help each other we sometimes get too involved.

25. In our family parents compromise to settle their differences.

26. We are flexible enough to do things spontaneously.

27. In my family mother and a child just end up yelling at each other when they try to discuss issues.

28. A child is extremely anxious about making a mistake when doing a task or solving a problem.

29. We feel free to express our real feelings at home.

30. Family members feel guilty if we want to spend time alone.

31. A child is able to get more attention or support from one parent rather than the other.

32. Father and a child seem to be fighting about the same thing again and again.

33. We avoid discussing a problem with each other if it may lead to an argument.

34. When parents disagree one of them ends up walking away angry.

35. We encourage each other to develop in his or her own individual way.

36. Some family members interfere with each other even though they mean well.

37. Mother puts a lot of energy into doing things with and for a child.

38. One or both parents is (are) totally involved in a child's life.
Remember:  
A = Very true  
B = More true than false  
C = More false than true  
D = Very false

39. We know each other well in our family.
40. Family problems tend to focus on one person at home.
41. In my family father and a child can talk over differences and settle them fairly.
42. We cannot be frank with each other.
43. Parents support each other in making family decisions.
44. Family members are flexible in whom they agree with or side with in family discussions and arguments.
45. Mother seldom responds when a child needs help or support.
46. In my family members think for themselves.
47. We feel close to each other even though family members hold different values or beliefs.
48. Parents never seem to argue about their own problems; instead, they argue with or about a child.
49. Father and a child just end up yelling at each other when they try to discuss issues.
50. We are careful about bringing up touchy topics with each other.
51. Parents work together to see rules are carried out around the house.
52. It's hard to break family routine at home.
53. When mother and a child disagree one of them ends up walking away angry.
54. One or both parents show a child exactly how to do his/her work.
55. There is a strong sense of loyalty in our family.
56. In our family a child feels it is possible to get a rule changed by getting the help of one parent against the other.
57. In our family father and a child compromise to settle their differences.
58. When someone in our family tries to bring up an issue the other one puts off discussing it by saying, "I can't talk about it now."
Remember:  
A = Very true  
B = More true than false  
C = More false than true  
D = Very false

59. Parents seem to be fighting about the same thing again and again.  
60. Rules are pretty flexible in our house.  
61. Mother is too busy with her own life to give attention to a child.  
62. One or both parents seldom let a child do things for himself/herself.  
63. We feel accepted for who we are in our family.  
64. The same person gets blamed for most of the problems in our family.  
65. Rather seldom responds when a child needs help or support.  
66. We don't deal with situations that may bring about an argument between us.  
67. Arguments between parents end up with one of them feeling resentful and hurt.  
68. As a child grows older he/she finds it easy to get more freedom from parents.  
69. Mother and a child seem to be fighting about the same thing again and again.  
70. When a child is having difficulties he/she is encouraged to think of and carry through his/her own solution.  
71. We spend very little time together in our family.  
72. One-parent often protects or defends a child at home.  
73. Father puts a lot of energy into doing things with and for a child.  
74. Parents back each other up in disciplining the children.  
75. Family members seem to “pair off” in the same way around issues in discussions or fights.  
76. When someone in my family gets hurt or upset we all get involved.  
77. In our family mother and a child compromise to settle their differences.  
78. So much attention is needed by a child that parents never seem to discuss issues just about themselves.
Remember:  
A = Very true  
B = More true than false  
C = More false than true  
D = Very false

79. Arguments between father and a child end up with one of them feeling hurt or angry.

80. In our family parents just end up yelling at each other when they try to discuss issues.

81. In our family people feel "cut off" from each other.

82. When parents disagree about an issue they sometimes make a child feel "caught in the middle."

83. A child has difficulty making decisions on his own and accepting responsibility for his choices.

84. There is very little privacy in our home.

85. Other family members are consulted and listened to before decisions are made by a person in our family.

Linda M. Perosa
ESCALA DE INTERACCIÓN ESTRUCTURAL DE LA FAMILIA-REVISADA

Linda M. Perosa Ph.D.
José Osorio. M.A., Ph.D. Candidate

Lea cada frase cuidadosamente. Para cada una de ellas elija la categoría mencionada a continuación la cual describe mejor a su familia y marque la respuesta con A, B, C, o D en la página adjunta.

A= Muy cierto
B= Más verdadero que falso
C= Más falso que verdadero
D= Muy falso

1. Somos una familia muy unida.
2. Cuando los padres no están de acuerdo en algo cada uno trata de que un hijo/a se ponga de su lado.
3. En nuestra familia parece ser que padre e hijo/a no pueden resolver sus diferencias satisfactoriamente.
4. Rara vez hablamos de las cosas que realmente nos molestan.
5. En nuestra familia los padres pueden hablar acerca de sus diferencias y resolverlas de una manera justa.
6. Nos parecemos en la forma de pensar y de actuar.
7. En casa fácilmente cambiamos la forma de hacer las cosas si es necesario.
8. Madre e hijo/a resuelven sus diferencias sin herirse los sentimientos uno al otro.
9. Los miembros de la familia son motivados a que hagan las cosas a su manera.
10. Nos interesamos en las actividades y los problemas de cada uno.
11. Un hijo/a siente que es necesario ponerse del lado de uno de los padres cuando ellos no están de acuerdo.
12. Nos sentimos responsables los unos de los otros.
Recuerde:  
A= Muy cierto  
B= Más verdadero que falso  
C= Más falso que verdadero  
D= Muy falso

13. El padre no está disponible cuando el hijo/a lo necesita.
14. No discutimos nuestras diferencias el uno con el otro.
15. Los padres pueden discutir sus diferencias y ambos sienten que su punto de vista fue considerado por el otro.
16. Los hijos encuentran que es fácil obtener más privilegios y responsabilidades a medida que se van haciendo mayores.
17. En mi familia madre e hijo/a pueden hablar de sus diferencias y resolverlas adecuadamente.
18. Miembros de nuestra familia se sienten mal si cada uno hace lo que quiere.
19. Uno o ambos padres son muy cuidadosos en cuanto a proteger a un hijo/a.
20. En nuestra familia falta el sentimiento de unidad.
21. El hijo/a se siente atrapado(a) en el medio cuando los padres discuten.
22. El padre está demasiado ocupado con su propia vida para prestar atención a un hijo/a.
23. Cuando alguien de la familia intenta hablar de un problema los demás evitan hablar de ello.
24. Cuando tratamos de ayudarnos unos a otros algunas veces nos envolvemos demasiado.
25. En nuestra familia los padres hacen concesiones a la hora de resolver sus diferencias.
27. En mi familia madre e hijo/a terminan a gritos cuando tratan de discutir algún asunto.
28. Un hijo/a se pone extremadamente nervioso(a) por miedo a cometer un error cuando tiene que hacer alguna tarea o resolver algún problema.
29. En casa nos sentimos libres de expresar nuestros verdaderos sentimientos.
Recuerde:  
A= Muy cierto 
B= Más verdadero que falso 
C= Más falso que verdadero 
D= Muy falso

30. Los miembros de mi familia se sienten mal si alguien de nosotros quiere estar solo.

31. Un hijo/a puede conseguir más atención y apoyo de uno de los padres que del otro.

32. Padre e hijo/a parece que pelean una y otra vez acerca de lo mismo.

33. Evitamos discutir problemas unos con otros si esto puede terminar en una pelea.

34. Cuando los padres no se ponen de acuerdo uno de ellos termina yéndose enfadado.

35. Nos animamos unos a otros a desarrollar nuestra manera individual de ser.

36. Algunos miembros de la familia se entrometen en los asuntos de los demás aunque lo hacen con buena intención.

37. La madre se esfuerza en hacer cosas con y para un hijo/a.

38. Uno o ambos padres está(n) totalmente envuelto(s) en la vida de un hijo/a.

39. En nuestra familia nos conocemos bien el uno al otro.

40. En nuestra casa los problemas familiares tienden a enfocarse en una persona.

41. En mi familia padre e hijo/a pueden discutir sus diferencias y resolverlas adecuadamente.

42. No podemos ser franco unos con otros.

43. Los padres se apoyan mutuamente cuando toman decisiones familiares.

44. Los miembros de la familia son flexibles en cuanto a la persona con quien están de acuerdo o con la que se ponen de lado en ocasión de discusiones y argumentos familiares.

45. La madre raras veces responde cuando uno hijo/a necesita ayuda o apoyo.
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Recuerde
A= Muy cierto
B= Más verdadero que falso
C= Más falso que verdadero
D= Muy falso

61. La madre está demasiado ocupada con su propia vida para prestar atención a un hijo/a.

62. Uno o ambos padres rara vez le permiten a un hijo/a hacer las cosas por sí mismo.

63. En nuestra familia nos sentimos aceptados por quien somos.

64. Siempre se culpa a la misma persona por la mayoría de los problemas en nuestra familia.

65. El padre raras veces responde cuando el hijo/a necesita ayuda o apoyo.

66. No tratamos con situaciones que puedan provocar discusiones entre nosotros.

67. Las discusiones entre los padres terminan con uno de ellos sintiéndose resentido y herido.

68. A medida que un hijo/a se hace mayor encuentra que es más fácil conseguir libertad de sus padres.

69. Madre e hijo/a parecen pelear por lo mismo una y otra vez.

70. Cuando un hijo/a tiene dificultades se le anima a que piense acerca de una solución y a que la lleve a cabo.

71. En nuestra familia pasamos muy poco tiempo juntos.

72. A menudo uno de los padres protege o defiende a un hijo/a en nuestra casa.

73. El padre se esfuerza mucho en hacer cosas con y por un hijo/a.

74. Los padres se apoyan mutuamente a la hora de disciplinar a los hijos.

75. Miembros de mi familia parecen unirse de la misma manera al tratar temas cuando hay discusiones o peleas.
6 Recuerde: A= Muy cierto  
B= Más verdadero que cierto 
C= Más falso que verdadero 
D= Muy falso

76. Cuando algún miembro de familia es herido o está enfadado, todos nos envolvemos.

77. En nuestra familia madre e hijo/a hacen concesiones a la hora de resolver sus diferencias.

78. Un hijo/a requiere tanta atención que parece ser que los padres nunca discuten sus propios asuntos.

79. Discusiones entre el padre e hijo/a terminan con uno de ellos sintiéndose herido o enojado.

80. En nuestra familia los padres terminan a gritos cuando tratan de discutir algún asunto.

81. En nuestra familia nos sentimos aislados los unos de los otros.

82. Cuando los padres no están de acuerdo en algún asunto, a veces hacen que un hijo/a se sienta atrapado en el medio.

83. Un hijo/a tiene dificultad en tomar decisiones por sí mismo/a y aceptar la responsabilidad de su elección.

84. En nuestra familia hay muy poca privacidad.

85. En nuestra casa se consulta con otros miembros de la familia y se escucha su opinión antes de que alguno tome una decisión.
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February 28, 1994

TO WHOM IT MAY CONCERN:

This is to certify that I, David Garrison, having a Ph.D. in Spanish from Johns Hopkins University and being at present Professor of Spanish at Wright State University (Dayton, Ohio), translated from Spanish "Escala de Interaccion Estructural de la Familia, Revisada." This document is a translation into Spanish by Alida Osorio of Linda Perosa's "Structural Family Interactional Scale - R."

I did my translation without consulting the original English, and then I compared my translation to the original in conjunction with Joseph Osorio. We found that the translations coincided in meaning almost exactly. We made only two minor changes.

I hereby give my permission to Joseph Osorio to reproduce and/or make use of my translation in his Ph.D. dissertation and in any other professional publication, providing that the translation is identified as my own.

Dr. David Garrison
Department of Modern Languages
Wright State University
Dayton, Ohio 45435
513-873-2641

February 28, 1994
**FACES II: Family Version**

David H. Olson, Joyce Portner & Richard Bell

<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Once in Awhile</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family members are supportive of each other during difficult times.</td>
<td></td>
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<tr>
<td>2</td>
<td>In our family, it is easy for everyone to express his/her opinion.</td>
<td></td>
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<tr>
<td>3</td>
<td>It is easier to discuss problems with people outside the family than with other family members.</td>
<td></td>
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<tr>
<td>4</td>
<td>Each family member has input regarding major family decisions.</td>
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<tr>
<td>5</td>
<td>Our family gathers together in the same room.</td>
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<tr>
<td>6</td>
<td>Children have a say in their discipline.</td>
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<tr>
<td>7</td>
<td>Our family does things together.</td>
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<tr>
<td>8</td>
<td>Family members discuss problems and feel good about the solutions.</td>
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<td></td>
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<tr>
<td>9</td>
<td>In our family, everyone goes his/her own way.</td>
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<tr>
<td>10</td>
<td>We shift household responsibilities from person to person.</td>
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<tr>
<td>11</td>
<td>Family members know each other's close friends.</td>
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<tr>
<td>12</td>
<td>It is hard to know what the rules are in our family.</td>
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<tr>
<td>13</td>
<td>Family members consult other family members on personal decisions.</td>
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<tr>
<td>14</td>
<td>Family members say what they want.</td>
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<tr>
<td>15</td>
<td>We have difficulty thinking of things to do as a family.</td>
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<td></td>
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<tr>
<td>16</td>
<td>In solving problems, the children's suggestions are followed.</td>
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</tr>
<tr>
<td>17</td>
<td>Family members feel very close to each other.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18</td>
<td>Discipline is fair in our family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Family members feel closer to people outside the family than to other family members.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>20</td>
<td>Our family tries new ways of dealing with problems.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>21</td>
<td>Family members go along with what the family decides to do.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>22</td>
<td>In our family, everyone shares responsibilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Family members like to spend their free time with each other.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24</td>
<td>It is difficult to get a rule changed in our family.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25</td>
<td>Family members avoid each other at home.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>When problems arise, we compromise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>We approve of each other's friends.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>28</td>
<td>Family members are afraid to say what is on their minds.</td>
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<td></td>
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</tr>
<tr>
<td>29</td>
<td>Family members pair up rather than do things as a total family.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30</td>
<td>Family members share interests and hobbies with each other.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FACES II: Family Version

**David H. Olson, Joyce Fortner & Richard Bell**

<table>
<thead>
<tr>
<th>Describa su familia:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Los miembros de la familia se apoyan mutuamente en tiempos difíciles.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>2.</strong> En nuestra familia, es fácil para cada uno expresar su opinión.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>3.</strong> Es más fácil discutir problemas con personas fuera de la familia que con los miembros de la familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>4.</strong> Cada miembro tiene voz y voto al hacer decisiones mayores en la familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>5.</strong> Nuestra familia se reúne en el mismo cuarto.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>6.</strong> Los hijos tienen voz y voto respecto a su disciplina.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>7.</strong> Nuestra familia tiene actividades juntas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>8.</strong> Los miembros de la familia discuten los problemas y se sienten satisfechos de las soluciones.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>9.</strong> En nuestra familia, cada cual se va por su rumbo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10.</strong> Nos intercambiamos los deberes de la casa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>11.</strong> Los miembros de la familia conocen los amigos fatimos de cada uno.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>12.</strong> Es difícil de saber cuáles son los reglamentos en nuestra familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>13.</strong> Los miembros de la familia se consultan entre ellos en hacer decisiones personales.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>14.</strong> Los miembros de la familia se expresan libremente.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>15.</strong> Tenemos dificultad en pensar las actividades que podemos hacer como familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>16.</strong> Al resolver problemas, las enojencias de los hijos son observadas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>17.</strong> Los miembros de la familia se sienten apoyados entre sí.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>18.</strong> La disciplina se juzga en nuestra familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>19.</strong> Los miembros de la familia se sienten más cerca a personas que no son de la familia que a los que están en la familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>20.</strong> Nuestra familia intenta nuevos métodos al resolver problemas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>21.</strong> Los miembros de la familia concuerdan de lo que el resto de la familia decide hacer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>22.</strong> En nuestra familia todos compartimos las responsabilidades.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>23.</strong> Los miembros de la familia disfrutan cuando pasan su tiempo libre juntos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>24.</strong> Es difícil que se cambie una reglación en nuestra familia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>25.</strong> Los miembros de la familia se evitan el uno al otro en casa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>26.</strong> Cuando surgen los problemas, intercambiamos ideas para resolverlos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>27.</strong> Aprobamos de las amistades de cada cual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>28.</strong> Los miembros de la familia tienen expresarse libremente.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>29.</strong> Los miembros de la familia hacen actividades en parejas en vez de hacerlas juntos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>30.</strong> Los miembros de la familia comparten los pasatiempos o &quot;hobbies&quot; juntos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
FACES III: VERSIÓN FAMILIAR

David H. Oleno, Joyce Peterson & Richard Bell

Nombre y apellidos:
Fecha de nacimiento:
Sexo: 
Madre, Padre, Adolescente

Instrucciones: Completa toda la parte I. y luego, completa toda la parte II. Por favor contesta todas las preguntas usando la siguiente guía.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cártula</td>
<td>De vez en vez</td>
<td>A veces</td>
<td>Frequentemente</td>
<td>Casi siempre</td>
</tr>
</tbody>
</table>

**PARTE I**

Como describirías tu relación ahora?

1. 
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**PARTE II**

Como creíste que tu relación fuera?

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(Tabla con cajitas marcadas con (+) y (-) y números)

(Traducido por Dr. Guillermo Bernal, Asistente Profesor, Departamento de Psiquiatría, Universidad de California, San Francisco, CA)
FACES II: Linear Scoring & Interpretation

**Cohesion**

| 8 | 80  |
| 7 | 74  |
| 7 | 73  |
| 6 | 65  |
| 5 | 64  |
| 4 | 59  |
| 3 | 54  |
| 2 | 50  |
| 1 | 34  |

**Adaptability**

| 8 | 70  |
| 7 | 65  |
| 6 | 64  |
| 5 | 54  |
| 4 | 45  |
| 3 | 42  |
| 2 | 39  |
| 1 | 29  |

**Family Type**

| 8 | Balanced |
| 7 | Balanced |
| 6 | Moderately Balanced |
| 5 | Balanced |
| 4 | Mid-Range |
| 3 | Mid-Range |
| 2 | Extreme |
| 1 | Extreme |

Cohesion + Adaptability = Type

____ / 2 = Type
INFORMACIÓN GENERAL DE LA FAMILIA

Esta información debe seguir al dibujo y a los cuestionarios:

Sección A: Miembros de la familia

1. Quiénes viven en esta casa?
   Padre_________madre_________hermano(s)_________hermana(s)_________
   Abuelo_________abuela_________hermanastro_________hermanastra_________
   otros____________________________________

2. Cuántos hermanos y hermanas hay y qué edad tienen?
   Haga una lista de los hijos comenzando por el mayor. Ponga una marca a los hijos previos del matrimonio. Una marca (✓) a los hijos del padre y dos marcas (✓✓) a los hijos de la madre.

<table>
<thead>
<tr>
<th>Hermanos</th>
<th>Edad</th>
<th>Viven en casa</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hermanas</th>
<th>Edad</th>
<th>Viven en casa</th>
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</thead>
<tbody>
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</table>

3. ¿Qué idioma se habla en casa?

Sección B: Información de los padres.

1. Información del padre:

<table>
<thead>
<tr>
<th>Edad</th>
<th>Casado</th>
<th>Viviendo juntos</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ocupación</th>
<th>Empleado: Sí</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Educación</th>
</tr>
</thead>
<tbody>
<tr>
<td>- No acabó la escuela secundaria</td>
</tr>
<tr>
<td>- Acabó la escuela secundaria</td>
</tr>
<tr>
<td>- Universidad</td>
</tr>
<tr>
<td>- Escuela vocacional</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grupo étnico</th>
<th>Religión</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Lugar de nacimiento</th>
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</thead>
<tbody>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Cuántos años lleva viviendo en este país?</th>
<th>Desde</th>
</tr>
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<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ha estado casado antes?</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Salario anual</th>
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</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Comentario (AO)</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>
Sigue información general de la familia

3. Información de la madre:

Edad__________ casada__________ viviendo juntos____________
Ocupación__________________________ Empleada: Si no____________
Educación
- No acabó la escuela secundaria____________
- Acabó la escuela secundaria____________
- Universidad________________________
- Escuela vocacional____________________

Grupo étnico__________________________ religión____________________
Lugar de nacimiento____________________
Cuántos años lleva viviendo en este país? Desde____________
Ha estado casada antes? ________________
Salario anual _________________________
Comentario (AO)______________________

4. Información del adolescente (IP)

Edad__________ sexo (M/F)__________ vive en casa__________
Soltero__________ casado__________ divorciado__________
Ocupación____________ empleado: si no____________
Educación:
- No acabó la escuela secundaria ______________
- Acabó la escuela secundaria____________
- Universidad________________________
- Escuela vocacional____________________

Grupo étnico__________________________ religión____________________
Lugar de nacimiento____________________
Cuando tiempo lleva viviendo en este país? Desde____________
Ha estado casado antes? ________________
Salario anual _________________________
Comentario (AO)______________________

5. Información adicional de la familia (Para el entrevistador)

Lugar: urbano_______ suburbano_______ rural_____________________
Otros comentarios________________________

Fecha________________________
To Whom It May Concern:

Joseph Osorio, an experienced professional, is a Ph.D. candidate at Andrews University. He has proposed a dissertation research topic which could make a significant contribution toward understanding the Hispanic family. Mr. Osorio plans to study both substance-abusing and non-substance-abusing families of adolescents. As chairperson of his research advisory committee, I can certify that this research project meets all the guidelines for ethical concerns established by the American Psychological Association and has been approved by the Human Subjects Review Board at Andrews University.

Assessment measures which have been designed for Hispanic families are very scarce. Counselors have few resources to use in understanding what is happening when a Hispanic family becomes dysfunctional. Mr. Osorio's research will make a significant contribution toward providing a measure which professionals can use in evaluating Hispanic families in a fair and unbiased manner. This study will also add to our understanding of substance abuse in the Hispanic population in the United States.

In order to complete this research study, Mr. Osorio needs to work with adolescents and their families. We would be most appreciative if you could help him make the appropriate contacts to facilitate this study. If you have any questions about this project, please feel free to call me at (616) 471-3303.

Thank you for your help.

Sincerely,

Donna J. Habenschlag, Ed.D.
Professor and Chair
Department of Educational
and Counseling Psychology
January 26, 1993

Dear Director:

As a doctoral candidate majoring in Counseling Psychology at Andrews University, I am conducting a research study which explores the usefulness of the Kinetic Family Drawing technique as an assessment measure of structural family functioning among Hispanic families with substance abusing and non substance-abusing adolescents.

The major purpose of this study is to test a new method for use in evaluating structural dimensions of family functioning and how people in Hispanic families see themselves and other family members through their drawings. This study is particularly important for institutions, agencies, and professionals working with Hispanic families with substance-abusing adolescents because there are very few validated and culturally appropriate instruments designed for use in evaluating this population.

I am requesting your endorsement to conduct this study in your facility among Hispanic adolescents between 12 and 20 years of age, who have had substance-abusing problems. Due to the specific nature of this sample, even a small number of your clients will be very useful. The adolescents and their parents will be asked to draw a picture of their family and to complete two additional questionnaires related to family interactions. All the data will be kept confidential and no names will be used with information. Participation will take 1 to 2 hours. There are no known hazards or risks associated with these standardized instruments.

The success of this research study depends on your generous cooperation. If you agree to support this project, please complete and return the enclosed postcard and you will receive a package with information to contact the client's parents. If you have any questions, feel free to call me collect (513) 439-4600.

I am looking forward to hearing from you soon.

Sincerely yours,

[Signature]

Jose A. Osorio
Doctoral student
HISPANIC AMERICAN FAMILY STUDY
Return Postcard Content

---Yes, we wish to cooperate & support this study.
Contact our office at the following address:
Name ____________________________________________
Address_____________________________
City ____________State _________Zip________
Phone ______________________________
Note _______________________________

---Sorry, we cannot participate in this research study.

Thank you for your answer
Dear Parents,

For several years I have been working across different Hispanic countries and in the USA leading educational programs in favor of the Hispanic family and adolescents. Now I am completing the final requirements for a Ph.D. in Counseling Psychology at Andrews University. The last part of my degree is a research study focusing on Hispanic American families and how these families with adolescents function.

The major purpose of this study is to test a new method for evaluating Hispanic family functioning and how people in families see themselves and other family members using family drawings. This study is particularly important for the Hispanic community in this country because there are very few validated and culturally appropriate instruments available to use in evaluating family relationships, communications, decision-making, and conflict resolution styles. Your cooperation with this study will be helping professionals to better understand how Hispanic families function according to their cultural background, especially families with adolescents.

You and your adolescent child will be asked to draw a picture of the family and complete two additional questionnaires related to family relationships. All the information will be kept strictly confidential and will not be shared with other family members. Drawings and questionnaires will not use names. There are no known hazards, risks, or inconveniences associated with these instruments. Your participation will require about 1-1/2 to two hours of your time.

Would you be willing, with your adolescent child, to participate in this project? Over 95 Hispanic families from different Hispanic groups will be participating in this study. Each family's contribution is extremely important in order to help Hispanic families dealing with adolescents as well as the Hispanic counseling agencies working with our population in this country.

The success of this project will depend on your generous cooperation.
If you and your adolescent child agree to participate, please complete, sign, and return the enclosed postcard. If you have any questions, feel free to call me collect at my phone (513) 439-4600.

I am looking forward to hearing from you soon.

Sincerely yours,

José Oseio-Brana
Doctoral student, Andrews University

561 W. Spring Valley Rd.
Canterville OH 43458
HISPANIC FAMILY STUDY

Return Postcard Content

Our family wishes to participate

Our family does not wish to participate

Parents and adolescent signature:

Parent's signature Date

Parent's signature Date

Adolescent's signature Date

Address

Phone numbers Home Work

Thank you for your answer.
Aplicaciones Padres:

Mi nombre es José Osorio, soy candidato doctoral de la Universidad de Andrews y estoy terminando los requerimientos para el grado de Doctor en Psicología y Consejería. Mis estudios requieren que lleve a cabo una investigación con personas hispanas con el fin de analizar la utilidad de usar dibujos de la familia en el proceso de evaluación de las relaciones familiares.

La mayoría de las técnicas de dibujos y cuestionarios que existen para evaluar las relaciones en la familia hispana están en inglés y sus traducciones e interpretaciones no son generalmente apropiadas para los hispanos. Como resultado, los consejeros se ven limitados cuando tienen que evaluar y tratar problemas de la familia hispana. Este estudio busca mejorar esta situación investigando la utilidad del test 'Dibujos Kinéticos De La Familia' para ser usado con esta población.

El éxito de este estudio depende de su generosa cooperación. Si ustedes se encuentran entre las familias hispanas que tengan un hijo(s) entre los 12 y los 20 años de edad, les agradecería mucho su participación. Se les pedirá a ustedes y a sus hijos hacer un sencillo dibujo y contestar dos cuestionarios relacionados con la familia. Toda la información provista será totalmente confidencial y su participación tomará aproximadamente una hora y media de su tiempo.

Si deciden apoyar este estudio les agradecería mucho llenen y devuelvan por correo la tarjeta adjunta. A continuación me pondré en contacto con ustedes para explicarles en detalle este proyecto. Si tienen alguna pregunta, pueden llamarme por teléfono con cargo a mi cuenta al número (513) 439-4600, o escribir a la siguiente dirección: 561 W. Spring Valley Rd., Centerville, OH. 45458.

Muchas gracias por considerar su participación en este importante estudio para la comunidad hispana en Estados Unidos.

Atentamente,

José Osorio-Braña
Candidato Doctoral
Andrews University
CONSENT FORM

This research study will explore the usefulness of the Kinetic Family Drawing as a measure of family system functioning among Hispanic American families with substance-abusing and non-substance-abusing adolescents.

You will be asked to draw a picture of your family, and to answer some questionnaires about family relationships, communication, decision-making, and problem-solving. There are no known hazards, risks, or inconveniences associated with this study.

All the information you provide will be held in strictest confidence. No names will be used in any reports of this research. Drawings and questionnaire answers will be coded with numbers and not labelled with any individual's name. Each family member's information will be kept confidential and will not be shared with other family members.

Your cooperation with this study will help mental health professionals understand how Hispanic American families function. You will be helping other families to cope better with substance-abusing adolescents. The procedure will require 1-1/2 to 2 hours of your time. You are free to stop your participation at any time.

---------------------------

CONSENT: We have read the contents of this consent form and have listened to the verbal explanations given by the investigator. Our questions concerning this study have been answered to our satisfaction. We hereby give voluntary consent to participate in this study for ourselves and our child. If we have any questions concerning this project or this consent, we may contact Jose Georgio-Brana at 561 W. Spring Valley Rd., Centerville, Ohio, or by calling (513) 439-4600.

__________________________  ________________
Parent's signature Date

__________________________  ________________
Parent's signature Date

__________________________  ________________
Child's signature Date
FORMULARIO DE AUTORIZACIÓN

Este estudio investiga la utilidad del test denominado Dibujo Kinético de la Familia (DKF), el cual evalúa a través de dibujos el funcionamiento estructural de las familias hispanas con hijos adolescentes dependientes de drogas y familias hispanas con hijos no dependientes de drogas.

A los padres e hijos participantes en este estudio se les pedirá hacer un dibujo de su familia y contestar cuestionarios adicionales relacionados con el funcionamiento y relaciones de la familia. No existen peligros, riesgos o inconvenientes conocidos o asociados con la toma de estos cuestionarios.

Toda la información provista se mantendrá estrictamente confidencial. No se mencionarán nombres o identificación alguna en ningún tipo de publicación de los resultados. La información de cada miembro de la familia no se compartirá con otros miembros de la misma familia. Los dibujos y cuestionarios serán codificados con números sin usar en ningún momento el nombre de las personas envueltas en el estudio. Además, usted tiene el derecho de detener su participación en cualquier momento.

PERMISO: Hemos leído el contenido de este formulario de autorización y escuchado las explicaciones verbales relacionadas con este estudio. Nuestras preguntas han sido contestadas a nuestra satisfacción. Damos, pues, aquí nuestra autorización voluntaria a participar en este estudio, nosotros (padres) y nuestros hijos. Si tenemos alguna pregunta relacionada con este estudio o esta autorización, nos sentiríamos libres de llamar a José Osorio-Graña al teléfono (513) 439-4600.

Firma del Padre
Fecha
Firma de la Madre
Fecha
Firma del hijo (a)
Fecha
RESEARCH STUDY INFORMATION

Purpose of This Research

There is a serious deficit of validated instruments to assess family processes among Hispanic American families using drawings. This study will explore the usefulness of the Kinetic Family Drawing as a measure of structural family concepts among Hispanic American families with substance-abusing and non-substance-abusing adolescents. Specifically, this research aims to test a scoring system which integrates Minuchin's Structural Family Theory constructs with the Kinetic Family Drawing technique for use in evaluating family drawings. Additional family assessment measures will be used to evaluate and compare (validate) family interaction patterns and functioning.

Research Information

<table>
<thead>
<tr>
<th>Families</th>
<th>Hispanic Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>Two- one-parent with adolescent(s)</td>
</tr>
<tr>
<td>Composition</td>
<td>Spanish or English</td>
</tr>
<tr>
<td>Sample #</td>
<td>Total of 74 families with substance-abusing adolescents and 67 families with nonsubstance-abusing adolescents</td>
</tr>
</tbody>
</table>

| Adolescents       | 13 through 20 |
|-------------------| Male and female |
| Substance abuse   | Identified as a substance abuser or nonsubstance-abuser |

Facilities and Time

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Table and four chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing</td>
<td>A quiet location</td>
</tr>
<tr>
<td>Time Involved</td>
<td>1-1/2 to 2 hours</td>
</tr>
</tbody>
</table>

Obtaining Sample Procedure:

Parents and adolescents will be asked to:
1. Draw a picture of the family.
2. Complete the following family questionnaires:
   - Structural Family Interaction Questionnaire.
   - Family Adaptability and Cohesion Questionnaire.
   - Demographic Information Questionnaire.

Administrators/Directors will be asked to:
1. Give permission for their adolescent to participate.
2. Advise regarding the best procedures for identifying selected adolescents and obtaining parental consent.
3. Provide physical facilities for data collection.

Supervisors/counselors will be asked to:
1. Introduce the researcher to the selected adolescents.
2. Make allowances for release time from regular activities.
3. Cooperate in the testing process with families.
APPENDIX C

MANUAL FOR THE KINETIC FAMILY
DRAWING SCORING SYSTEM
(KFSSS)
MANUAL FOR THE KINETIC FAMILY DRAWING
STRUCTURAL SCORING SYSTEM
(KFDSSS)

Adapted by
José Osorio-Braña

1996
INSTRUCTIONS FOR OBTAINING KFD RAW SCORES

Variables Regarding Family Hierarchy

Scoring Criteria for Relative Size

1. Size of the father figure (SIZDAD)
2. Size of the mother figure (SIZMOM)
3. Size of the IP child (SIZIP)

Measurements are in centimeters rounded off to the nearest tenth centimeter. Figures sitting or reclining are measured diagonally:

Figures are measured between their most extreme points even if these are pieces of clothing or hair wisps:

Scoring Criteria for Vertical Displacement

4. Vertical displacement of father (VDISD)
5. Vertical displacement of mother (VDISM)
6. Vertical displacement of IP Child (VCISIP)

Measurements are in centimeters rounded off to the nearest tenth centimeter. Vertical Displacement is defined as the distance from the bottom of the page to the uppermost point of the figure including clothing or hair:

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Variables Regarding Family Subsystem

Scoring Criteria for Distance

7. Distance between father and mother (DSDM)
8. Distance between father and IP child (DISDIP)
9. Distance between mother and IP child (DISMIP)

Measurements are in centimeters rounded off to the nearest tenth centimeter. Clothing or hair is considered part of the figure. Arm extensions or tools are not. Distance should reflect the shortest distance between two figures:

If a figure is placed on the back of the page distance between it and a figure on the front is defined by the following convention. eg. for figures B and C, Distance = distance from B to the right margin of side 1 plus distance from the left margin of the back page to C:
Scoring Criteria for Central/Horizontal Displacement

10. Central Displacement, father (CDISO)
11. Central Displacement, mother (CDISM)
12. Central Displacement, child (CDISIP)

Measurements are in centimeters rounded off to the nearest tenth centimeters. Central/Horizontal Displacement is defined as the distance from the left margin of the page to the right most point of the figure subtracted from \( \frac{1}{2} \) the length of the page.

If the figure is on the back of the page, add the horizontal length of one page to the distance of the figure from the left margin on the back page. For example, the displacement of figure C =

\[
\begin{array}{c}
\text{Front} \\
A \quad B
\end{array} + \begin{array}{c}
\text{Back} \\
C
\end{array}
\]
Scoring Criteria for Types of Barriers

13. Type of barriers between mother & father (TBRRMD)
14. Type of barriers between father & IP child (TBRRDIP)
15. Type of barriers between mother & IP child (TBRRMIP)

<table>
<thead>
<tr>
<th>Types of Barrier</th>
<th>TBARRMD</th>
<th>TBRRIPD</th>
<th>TRRIPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier Inhibiting Visual Contact</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Barrier Hindering Physical Contact</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>More than Two Persons in between</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Two or Less Persons in between</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No Significant Barrier in between</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

16. Scoring criteria for compartmentalization of figures (COMPART)

   ( 0 ) Not present
   ( 1 ) Present

17. Scoring criteria for encapsulation of individual figures (ENCAPS)

   ( 0 ) Not present
   ( 1 ) Present
Variables Regarding Boundaries

Scoring Criteria for Differentiation of Figures

18. Differentiation Family Figures Score (DIFFFS)

The differentiation family score includes the sum of the variables 19 (INDFEA), 20 (POSDIF), 21 (GEBBON), and 22 (DIFSEX). This scale assesses the extent to which individual differences are reflected in each drawing. It asks the questions: Do the father, mother, and index child figures look different from each other? Are they recognizable as representing individuals with differing characteristics or personalities? The differentiation score ranges from 0 to 9 and represents the summed scores for variables below. Specific examples for scoring are given on the following variables.

19. Individual features variable (INDFEA).

If the three following factors are present it receives a bonus point, for a possible total of 4 points.

a. Differing Hair Styles

If differing hair styles are present for the three figures, 1 point.

Hairstyle

Any difference in hairstyle for the three figures regardless of sex appropriateness is scored:

Any of the above differences are appropriate. Examples of scoring are as follows:

Score 1 - All figures differ.  Score 0 - All figures are the same  Score 0 - Only two figures differ.
b. Differing Facial Parts or Expressions

Are the faces of the three figures recognizably different? Facial features include eyes, nose, mouth, eyebrows (see examples). Any difference in any facial feature present for the three figures scores 1 point.

Facial Parts or Expressions
A change in only one small feature makes a face look different. Accordingly facial expression is scored liberally. As long as two pairs of figures in the drawing each have 1 difference in facial feature it is scored.

Examples of possible Differences:

Face Shape

Mouths

Nose
Eyebrows

Examples of Scoring are as follows:

Score 1 - Each face has different eyes.

Score 0 - All faces are alike

Score 1: A & B have different eyes, A & C different mouths.

Score 0 - Only 1 pair differs in eyes.
c. Differing Clothing or Clothing Styles

Score 1 point if these are present for the three figures (see examples).

Clothing:
This is also scored liberally regardless of how primitive or subtle, as long as recognizable differences in clothing exists for the three figures. Shading and accessories count as differences:

"Pants"  "Skirt"  Buttons  Pocket

Buttons  no collar  collar  belt  color  jewelry
20. Different positions or actions (DIFPOS)

This variable receives a score of 0 to 3 as follows:

- All figures engaged in one activity with the same action and same posture 0 points
- All figures engaged in one activity with two or more members in different postures 1 point
- Two figures engaged in different activities 2 points
- All three figures doing different things 3 points

All three figures are engaged in one activity in one posture - Score 0

![All Eating](image1)

![All Playing Catch](image2)

All three figures are engaged in one activity with two or more members in different postures. Score 1:

![All Eating, different positions](image3)

![All Playing Catch, different positions](image4)
Two figures are engaged in different activities. Score 2:

- Sailing
- Reading

All three figures are engaged in different activities. Score 3:

- Sailing
- TV
- Cooking

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21. Generational Boundaries (GENBON)

Do adults look different from child figures? If adult figures are drawn larger, higher, or somehow separate from children or as a couple score 1 point.

This is scored if adult figures are drawn as a couple or as larger, higher or somehow separate from the children:

- Score 1
- Score 0

22. Gender Differences (DIFSEX)

Do males appear different from females? If differences such as sex appropriate clothing, secondary sex characteristics, etc. cause males and females to appear different, score 1 point.
Scoring Criteria Figures Orientation

23. Orientation father and mother (ORDM)
24. Orientation father and IP child (ORDIP)
25. Orientation mother and IP child (ORMIP)

This is given a possible score of 0 to 6 as follows:

- **Unscoreable**
  - $= 0$

- **Both turned away**
  - $= 1$

- **One turned away**
  - $= 2$

- **Back to page**
  - $= 2$

- **Ambiguous**
  - $= 3$

- **Neutral**
  - $= 4$

- **One turned toward**
  - $= 5$

- **Both turned toward**
  - $= 6$
### Scoring Criteria for Nurturing

<table>
<thead>
<tr>
<th>Nurturance</th>
<th>NURDAD</th>
<th>NURMOM</th>
<th>NURIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>No nurturing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Planting</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Helping</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Grooming</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Cooking</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Touching</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Holding</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Feeding</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

### Scoring Criteria for Cooperation

<table>
<thead>
<tr>
<th>Cooperation</th>
<th>COOPDAD</th>
<th>COOPMO</th>
<th>COOPIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>No cooperation</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Working</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Helping</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Playing (together)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Working (together)</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Variables Regarding Family Adaptability

32. Scoring Criteria for Sexual Characteristics (SEXCAR)

This scale assesses the extent to which sexual differences are recognized, and sexuality is reflected in each drawing. It encompasses basic male-female differences in clothing, hairstyle, apparent secondary sex characteristics, and some symbols of sexuality. Each characteristic described below (with the exception of buttocks) is scored only if it is restricted to one sex. Scores for each variable are summed for the total sexual differentiation possible total score of 10-1/2 (0 to 101/2).

Hairstyle:
This is scored if males are shown as balding or with short hair and females are shown with longer or styled hair.

Score 1 if males

Score 0 if figures are depicted as follows:

male female male female male female

Facial Characteristics
Score 2 if males have a beard or moustache or

if females have a cosmetic face which looks like lipstick rouge and eyelashes. Note all three features must be present.

Score 0 if there are no differences between men and women or if males have elements of a cosmetic face.
Chests:
Score 2 points if males have hair on their chest or

if females have breasts:

outline  cleavage  front view  profile

Score 0 if males show any female features or vice versa.

Other Body Features
Score 2 points if males are shown with muscles or females are shown with hips:

Males: Muscles (not scored if also shown for females)

Females shown with hips. A curve must be apparent.
(Not scored if shown for males)

Buttocks
Score 1 point if this is present for either or both sexes
Clothing

The clothing score is a summed score of the following three variables for a possible total of 2:

Pants Versus Skirt
Score 1 if males are shown with pants and females are shown with skirts. Score 0 if females and males are wearing pants or if males or females are wearing ambiguous clothing.

Accessories
Score 1 if any of the following are present for the appropriate sex:

- Males: Necktie, Zipper, Cigar, Pipe (con't)
- Females: Necklace, High Heels, Bows etc., Purse, Nailpolish

Bathing Suit
Score 1 if sex appropriate bathing suit is present for males or females:

- Males (only shorts)
- Females (one or two piece suit)
Scoring Criteria for Figure Activity Level

33. Activity level of the father (ACTDAD)
34. Activity level of the mother (ACTMOM)
35. Activity level of the IP child (ACTIP)

The rating for this category ranges from 0 (passive) to 8 (aggressive) in terms of the level of activity of figures. This variable should be scored separately for mother, father, and self figures. A list of possible and/or depicted activities with their corresponding rating may be used from the next page.*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Index</th>
<th>Child</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laying</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sitting</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Riding</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Running</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Throwing</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Cutting</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Hitting</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Scoring Criteria for Like-To-Live In-Family

36. General impression of family satisfaction (LILIF)

<table>
<thead>
<tr>
<th>Like-To-Live in KFD Family</th>
<th>Definitely Not</th>
<th>Probably Not</th>
<th>Neutral</th>
<th>Probably</th>
<th>Definitely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Scoring Criteria for Human Figures

37. Number of Human Figures (HMFIG)

The scoring is based on the number of human figures in the drawing.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Score Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arranging clothes</td>
<td>3</td>
<td>Having</td>
</tr>
<tr>
<td>Arranging flowers</td>
<td>3</td>
<td>Office work</td>
</tr>
<tr>
<td>Baby sitting</td>
<td>5</td>
<td>Ordering (position)</td>
</tr>
<tr>
<td>Badminton</td>
<td>8</td>
<td>Painting pictures</td>
</tr>
<tr>
<td>Basketball</td>
<td>6</td>
<td>Picking up</td>
</tr>
<tr>
<td>Betting</td>
<td>8</td>
<td>Picture taking</td>
</tr>
<tr>
<td>Being hurt</td>
<td>8</td>
<td>Planting</td>
</tr>
<tr>
<td>Bowling</td>
<td>8</td>
<td>Playing</td>
</tr>
<tr>
<td>Burning</td>
<td>7</td>
<td>Playing music</td>
</tr>
<tr>
<td>Catching</td>
<td>6</td>
<td>Praying</td>
</tr>
<tr>
<td>Cleaning</td>
<td>5</td>
<td>Putting out a fire</td>
</tr>
<tr>
<td>Climbing</td>
<td>3</td>
<td>Riding</td>
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<tr>
<td>Coloring</td>
<td>3</td>
<td>Repairing</td>
</tr>
<tr>
<td>Cooking</td>
<td>4</td>
<td>Riding</td>
</tr>
<tr>
<td>Crewing</td>
<td>4</td>
<td>Riding</td>
</tr>
<tr>
<td>Crying</td>
<td>6</td>
<td>Running</td>
</tr>
<tr>
<td>Cutting</td>
<td>7</td>
<td>Sunbathing</td>
</tr>
<tr>
<td>Dancing</td>
<td>5</td>
<td>Selling</td>
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<tr>
<td>Digging</td>
<td>7</td>
<td>School work</td>
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<tr>
<td>Dividing</td>
<td>6</td>
<td>Sewing</td>
</tr>
<tr>
<td>Drawing</td>
<td>3</td>
<td>Sewing</td>
</tr>
<tr>
<td>Dressing</td>
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<td>Shooting</td>
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<td>Driving</td>
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<tr>
<td>Drying</td>
<td>4</td>
<td>Shouting</td>
</tr>
<tr>
<td>Eating</td>
<td>4</td>
<td>Singing (position)</td>
</tr>
<tr>
<td>Exercising</td>
<td>5</td>
<td>Sitting</td>
</tr>
<tr>
<td>Falling</td>
<td>8</td>
<td>Skiing</td>
</tr>
<tr>
<td>Feeding animals</td>
<td>4</td>
<td>Skin diving</td>
</tr>
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<td>Feeding people</td>
<td>4</td>
<td>Sleeping</td>
</tr>
<tr>
<td>Fetching water</td>
<td>6</td>
<td>Smoking</td>
</tr>
<tr>
<td>Fighting</td>
<td>8</td>
<td>Spraying</td>
</tr>
<tr>
<td>Fishing</td>
<td>4</td>
<td>Standing</td>
</tr>
<tr>
<td>Flying</td>
<td>3,4</td>
<td>Sunbathing</td>
</tr>
<tr>
<td>Gardening</td>
<td>5</td>
<td>Sweeping</td>
</tr>
<tr>
<td>Getting angry</td>
<td>8</td>
<td>Swimming</td>
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<tr>
<td>Golf</td>
<td>8</td>
<td>Swimming</td>
</tr>
<tr>
<td>Grooming</td>
<td>4</td>
<td>Talking (position)</td>
</tr>
<tr>
<td>Hammering</td>
<td>8</td>
<td>Telephoning (position)</td>
</tr>
<tr>
<td>Hanging</td>
<td>7</td>
<td>Throwing</td>
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<tr>
<td>Helping</td>
<td>5</td>
<td>Vacuuming</td>
</tr>
<tr>
<td>Hiding</td>
<td>4</td>
<td>Waiting (position)</td>
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<tr>
<td>Hitting</td>
<td>8</td>
<td>Walking</td>
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<tr>
<td>Hosing</td>
<td>4</td>
<td>Washing</td>
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<td>Hurting</td>
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<td>Washing clothes</td>
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<tr>
<td>Ironing</td>
<td>3</td>
<td>Washing dishes</td>
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<tr>
<td>Jumping</td>
<td>5</td>
<td>Washing the car</td>
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<tr>
<td>Kicking</td>
<td>9</td>
<td>Watching (position)</td>
</tr>
<tr>
<td>Kite flying</td>
<td>4,5</td>
<td>Watching TV, movie</td>
</tr>
<tr>
<td>Knitting</td>
<td>3</td>
<td>Watering the plants</td>
</tr>
<tr>
<td>Listening (position)</td>
<td>0,1,2</td>
<td>Waving (position)</td>
</tr>
<tr>
<td>Looking (position)</td>
<td>0,1,2</td>
<td>Whistling (position)</td>
</tr>
<tr>
<td>Lying in bed</td>
<td>0</td>
<td>Writing a letter</td>
</tr>
<tr>
<td>Making beds</td>
<td>3</td>
<td>Writing - typewriting</td>
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</table>

*SCORING CRITERION FOR ACTIVITY LEVEL*
KFD STRUCTURAL SCORE SHEET (KFDSSS)

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
<th>Father</th>
<th>Mother</th>
<th>Adoles</th>
<th>Group</th>
<th>ID#</th>
</tr>
</thead>
</table>

**FAMILY HIERARCHY**

1. Size of Father Figure
   - __ __ (SIZDAD)
2. Size of Mother Figure
   - __ __ (SIZMOM)
3. Size of IP Child Figure
   - __ __ (SIZIP)
4. Vertical Displacement Father
   - __ __ (VDISD)
5. Vertical Displacement Mother
   - __ __ (VDISM)
6. Vertical Displacement IP Child
   - __ __ (VDISIP)

**FAMILY SUBSYSTEMS**

7. Distance Between Father & Mother
   - __ __ (DISDM)
8. Distance Between Father & IP Child
   - __ __ (DISDIP)
9. Distance Between Mother & IP Child
   - __ __ (DISMIP)
10. Horizontal Displacement Father
    - __ __ (CDISD)
11. Horizontal Displacement Mother
    - __ __ (CDISM)
12. Horizontal Displacement IP Child
    - __ __ (CDISIP)
13. Type of Barriers between Mother & Father
    - __ __ (TBRRDIP)
14. Type of Barriers between Father & IP Child
    - __ __ (TBRRMIP)
15. Type of Barriers between Mother & IP Child
    - __ __ (TBRRIPM)
16. Compartmentalization of Figures
    - (COMPART)
17. Encapsulation of Figures
    - (ENCAPS)

**FAMILY BOUNDARIES**

18. Differentiation Score
    - (DIFFS)
    (Sum of #19, #20, #21, #22 bracketed variables)
19. Individual features
    - __ __ (INDFEA)
    - Hair Style __
    - Facial Expression __
    - Clothing __
    - All 3 Factors __
20. Different Positions
    - __ __ (DIFPOS)
21. Generational Boundaries
    - __ __ (GENBON)
22. Gender Differences
    - __ __ (DIFSEX)
23. Orientation Mother & Father
    - __ __ (ORM)
24. Orientation Father & IP Child
    - __ __ (ORDIP)
25. Orientation Mother & IP Child
    - __ __ (ORMIP)
26. Nurturing Father
    - __ __ (NURDAD)
27. Nurturing Mother
    - __ __ (NURMOM)
28. Nurturing IP Child
    - __ __ (NURIP)
29. Cooperation Father
    - __ __ (COOPDAD)
30. Cooperation Mother
    - __ __ (COOPMOM)
31. Cooperation IP Child
    - __ __ (COOPIP)
FAMILY ADAPTABILITY

32. Sexual Characteristics
   Hairstyle
   Facial Characteristics
   Chests
   Other Body Features
   Buttocks
   Clothing
   1. Paint/skirt
   2. Accessories
   3. Bathing Suit

33. Activity Level of the Father
34. Activity Level of the Mother
35. Activity Level of the Child
36. General Impression of Family Satisfaction
37. Number of Human Figures

Additional Notes: 0 = missing figure; @ not scorable or no information.

Rate Initials _____________ Date ____________
REFERENCES


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Perosa, L. (1995). Personal communication with the researcher at Ohio State University.


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   Evangelist, Communication Director,
   Health/Temperance Director
1974-1978 SDA Columbia Union Conference
   Ministerial Director, Evangelist,
   Religious Liberty Director,
   Temperance Director, Seminary
   Senior students' Professor
1980-1983 SDA Antillian Union Conference
   Ministerial Director, Evangelist,
   Temperance Director
1984-1992 SDA Ohio Conference
   Spanish Coordinator, Minister
1992-1996 Leave of Absence
   Internship and doctoral research