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Kinetic Family and Human Figure Drawings of Child and Adolescent Sexual Offenders

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School of Education

KINETIC FAMILY AND HUMAN FIGURE DRAWINGS OF CHILD AND ADOLESCENT SEXUAL OFFENDERS

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Lyle Curtis Miller

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DEDICATION

To Rachel, my en sevgili karim and tatli kalbim. Sen beni acarsan.

In His time, our God caused our paths to cross and our lives to merge. Together we have journeyed far. Time and again, God has opened doors and supplied all our needs--and more. Thank you, God.

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ABSTRACT

KINETIC FAMILY AND HUMAN FIGURE DRAWINGS OF CHILD AND ADOLESCENT SEXUAL OFFENDERS

by

Lyle Curtis Miller

Chair: Elsie P. Jackson

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: KINETIC FAMILY AND HUMAN FIGURE DRAWINGS OF CHILD AND ADOLESCENT SEXUAL OFFENDERS

Name of researcher: Lyle Curtis Miller

Name and degree of faculty chair: Elsie P. Jackson, Ph.D.

Date: November 1995

Problem

Juvenile sexual offenders constitute a significant percentage of the total offender population. This study sought to determine whether the KFD and the HFD can be useful in identifying male juvenile sexual offenders by identifying specific characteristics in their drawings that differentiate them from the general population.

Method

KFDs, HFDs, and demographic information were collected from 401 male general subjects and 49 male juvenile sexual offenders ages 8 to 17. Forty-three KFD

and 30 HFD dependent variables involving emotional and behavioral indicators and sexual symbols were analyzed by Chi-Square Analysis and Discriminant Analysis. Significance was set at .05.

Results

There were significant differences between the KFDs and HFDs of juvenile sexual offenders as compared to general subjects. Offenders more often: (1) omitted facial features on the father; (2) omitted the body, arms, hands, and feet on the mother and father figures; (3) omitted the father and mother figures from their drawings; (4) drew a long neck on the mother figure; (5) drew a mother figure that showed lack of nurture; (6) drew distance between self and the mother and father figures; (7) drew slanting figures; (8) drew KFDs in which the evaluator would not like to live in the family; (9) drew dangerous objects and activities; and (10) drew barriers between the mother and father figures.

Offenders, when drawing a human figure, more often drew: (1) short arms, (2) teeth, (3) large hands, (4) large feet, (5) arms without hands or fingers, (6) dangerous objects. They less often drew with (1) transparencies and (2) dangerous activities.

Conclusions

The KFDs of juvenile sexual offenders were significantly different from the general population in 23 of the 43 dependent variables. The HFDs of the offender group were significantly different in 9 variables. These analyses suggest that child and adolescent sexual offenders may be identified by their KFDs and HFDs.

CHAPTER I

INTRODUCTION

The United States is becoming increasingly aware of the seriously high rate of child abuse in our nation. Because of this, President Bill Clinton signed the National Child Protection Act on December 20, 1993 (Santoli, 1994).

Mental health professionals during the last decade have recognized sexual abuse as a major social problem in our society. The American public has a growing awareness of its scope. Jan Hindman, a nationally recognized author and therapist for both sexual abuse victims and sexual offenders, writes, "Child sexual abuse has emerged as an epidemic problem for this nation in the recent decade" (Hindman, 1991, p. 7). "Child abuse happens in all types of communities, wealthy or poor. Each year, some 2,000,000 children are victims of physical and sexual maltreatment" (Santoli, 1994, pp. 12-13).

Sexual abuse of children has become a growing concern not only in the United States but also in other countries since the 1970s (Paden-Gelster & Feinauer, 1988). Although in recent years it may have been

considered uncommon, it appears that the incidence and prevalence of child sexual abuse is increasing. The 1,975 cases reported nationwide in 1976 grew to 22,918 by 1982. An effort to systematically estimate the number of cases known to professionals put the figure at more than 44,700 in 1979 (Finkelhor, 1984).

In the 1980s, several authors estimated that 1/4 million cases of child sexual abuse occur yearly, with 1 out of 3 or 4 girls and 1 out of 10 boys being molested prior to reaching age 18 (Adams-Tucker & Adams, 1984; Alter-Reid, Gibbs, Lachenmeyer, Seigal, & Massoth, 1986; Finkelhor, 1984; Herbert, 1985; Roscoe, 1984; Thorman, 1983).

According to Finkelhor and Dziuba-Leatherman (1994), a now widely recognized reality is that children are more prone to victimization than adults are. They cite the 1990 National Crime Survey that shows the rates of assault, rape, and robbery against those aged 12 to 19 years are two to three times higher than for the adult population as a whole. Studies that gather information from adults on their lifetime experience with crime confirm this disproportionate victimization of children. Kilpatrick (1992) states that in the first national survey asking adult women about their lifetime experiences of forceful rape, 61% report that their rapes occurred before

the age of 18. This means that the rape risk for children is five times higher than it is for adults.

The known incidents of physical and sexual abuse in the general population of children and adolescents are high enough to be considered a major public health problem (Walker, Bonner, & Kaufman, 1988).

Sedlak (1991) for the year 1986 sets the rate of sexual abuse for children ages 0 to 17 years at 2.1 victims per thousand population. The total number of reported victims for that year was 133,600. For the year 1991, Daro and McCurdy (1991) placed the rate of sexual abuse for children ages 0 to 17 years at 6.3 victims per thousand, making a total of 404,100.

Abused children may be a danger to self or others. Dr. Bruce Perry, Professor of Child Psychiatry at Baylor College of Medicine, Houston, Texas, says:

> It's astounding how little psychiatrists know about abused children and effective forms of therapy. These children often grow up sad or angry, become self-destructive in relationships and pass it on to their own children and loved ones. Some seek other people to hurt. We must identify these high risk children and provide them with loving and supportive environments. (cited by Santoli, 1994, pp. 12-13)

Juveniles constitute a sizable segment of those who are abusing children. Identifying the incidence and prevalence of juvenile sexual offenders involves many unknown variables, some of which are further explored in the literature review of chapter 2. Studies of adult

offenders' self-reports indicate that over 50% of adult sexual offenders began committing sexual molestation before age 18 (Abel et al., 1984; Freeman-Longo, 1983). A review of the literature indicates that much more has been written about identifying and treating victims and offenders after sexual abuse has taken place than has been written about identifying potential sexual offenders and applying preventive measures before they offend.

The Kinetic Family Drawing may be one method of identifying potential sexual offenders. For more than half a century, family drawings have been used as assessment tools for identifying individuals with a wide variety of emotional and behavioral difficulties (Appel, 1931; Golomb, 1987; Goodwin, 1982; Manning, 1987; Stawar & Stawar, 1987). The Kinetic Family Drawing (KFD), developed by R. C. Burns and S. F. Kaufman (1970), evolved from projective drawings that were used to evaluate and diagnose individuals with learning, emotional, or behavioral disorders. One of the earliest projective drawing tests was the Draw-A-Person Test (DAP) (Goodenough, 1926; W. C. Hulse, 1952), which attempted to measure intelligence. J. N. Buck (1948) introduced the House-Tree-Person (HTP), another projective instrument, to aid in the psychological assessment of adults and adolescents. Koppitz (1968) devised a comprehensive

method of psychological evaluation using Human Figure Drawings (HFD).

The KFD added the kinetic dimension to the already established methodology of using projective drawings for assessment purposes. Subjects drew their families, including themselves, with each person drawn doing something, that is, kinetic action. By adding the kinetic dimensions, Burns and Kaufman contributed to the understanding of the self within the family, along with understanding family relationships and dynamics.

Statement of the Problem

KFDs have been used for many purposes, including: examining children's conflicts and self as part of family (Alessandrini, 1985), studying family structure (Gardano, 1988), identifying sexually abused children (Hackbarth, 1988), identifying adolescent male delinquents (Sobel & Sobel, 1976), and studying family dynamics (O'Brien & Patton, 1974). Some authors have hypothesized that there is evidence of sexual molestation, abuse, experience, or psychopathology if certain aspects, such as sexual symbols and/or actions, are present in drawings (German, 1986; Kinget, 1952; Ogdon, 1986; Rodgers, 1992). To validate such assumptions and to determine whether KFDs can be useful in identifying individuals with specific emotional characteristics, more research is needed. The prevalence

of sexual offenders in our society clearly indicates the need for identifying past or potential offenders.

Purpose of the Study

The purpose of this research was to determine if Kinetic Family Drawings and Human Figure Drawings of 8- to 17-year-olds can be used to differentiate between the child and adolescent sexual offenders and the child and adolescent general population.

Research Questions

This study sought to answer the following questions regarding the Kinetic Family Drawing and the Human Figure Drawing:

1. Can child and adolescent sexual offenders be identified by analyzing their Kinetic Family Drawings and Human Figure Drawings?

2. What are the significant indicators, if such sexual offenders can be identified using the Kinetic Family Drawing and the Human Figure Drawing?

Statement of Hypotheses

It is within the global hypothesis of this study that, through their drawings, persons will project or reveal their inner selves, including feelings about self, sexuality, and sexual experience. Four specific research hypotheses arise out of this global hypothesis.

Hypothesis 1: For each separate Kinetic Family Drawing variable, there is a significant difference in the response patterns of child/adolescent sexual offenders and the general population.

Hypothesis 2: There is a linear combination of Kinetic Family Drawing variables that significantly discriminates between child/adolescent sexual offenders and the general population.

Hypothesis 3: For each separate Human Figure Drawing variable, there is a significant difference in the response patterns of child/adolescent sexual offenders and the general population.

Hypothesis 4: There is a linear combination of Human Figure Drawing variables that significantly discriminates between child/adolescent sexual offenders and the general population.

Theoretical Framework

Projective Techniques

A projective technique is an instrument that is considered especially sensitive to covert or unconscious aspects of behavior. It permits or encourages a wide variety of subject responses, is highly multidimensional, and evokes unusually rich and profuse response data with a minimum of subject awareness concerning the purpose of the test. The stimulus material presented by the projective test is ambiguous, interpreters of the test depend on

holistic analysis, the test evokes fantasy responses, and there are no correct or incorrect responses to the test (Lindzey, 1961).

The aim of projective techniques is to gain insight into the individual's personality. Projective methods differ significantly from objective inventory type personality tests by focusing on the "global" aspects of personality versus the "atomistic," which focuses upon personality traits (Anastasi, 1976). In the broader sense of projection inherent in projective methods, according to Frank (1939), a person projects at all times when responding to environment in an idiosyncratic fashion. Rabin (1981) sets forth two basic aspects of any projective method: (1) the particular situation or stimulus confronting the individual, and (2) the response of the individual in terms of the meaning the stimulus has for self.

Projective methods utilize both visual and verbal stimuli to elicit an individual subject's underlying motivations, needs, fantasies, and feelings. The Rorschach and Thematic Apperception Test are exemplary of those using visual stimuli. Sentence completion and story-telling tasks utilize verbal stimuli. Projective drawings, such as the KFD, HFD, and HTP, use verbal stimuli but also elicit psychomotor responses and

associations to the verbal stimuli in the data-collection process.

Projection, the concept serving as the cornerstone upon which projective methods are built, is a term first introduced and described as early as 1894 by Freud (1924). That year he wrote his paper "The Anxiety of Neurosis," stating, "The psyche develops the neurosis of anxiety when it feels itself unequal to the task of mastering (sexual) excitation arising endogenously. That is to say, it acts as if it had projected this excitation into the outer world" (p. 102).

In Freud's psychoanalytic theory (Schultz, 1990), the structure of human personality consists of the id, the aspect of personality allied with instincts and the source of psychic energy, operating according to the pleasure principle; the ego, the rational aspect of the personality responsible for directing and controlling the instincts; and the superego, the moral aspect of personality. Thus the human psyche is comprised of conscious and unconscious aspects.

The conscious includes all sensations and experiences of which a person is aware at any given moment. It is a small and limited aspect of personality, because only a small portion of thoughts, sensations, and memories exists in the conscious awareness at any one time. In likening the mind to an iceberg, Freud

maintained the conscious is merely the tip of the iceberg, that is, the portion above the surface of the water.

The unconscious, according to Freud, was much more important. It is the larger, invisible portion of the psyche which is concentrated below the surface that is the focus of the psychoanalytic theory. In the unconscious are the vast, dark depths containing the instincts, wishes, and desires directing and determining a person's behaviors. Here is the repository of forces a person cannot see or control, but it contains the major driving power behind behavior.

The conscious, that part of the psyche of which the individual is aware, is affected by the unconscious, the part of which the individual is not aware. Experiences too painful to express or even think about can be pushed from the conscious to the unconscious, thus enabling a person to deal with life by not consciously re-experiencing those painful experiences.

Freud presents projection as a defensive process permitting a person to be essentially unaware of negative feelings within self. A person can thus attribute one's own feelings, drives, and sentiments to other people or to the outside world, even against efforts to restrain them. This defensive mechanism, common to humanity, can be of help to understand a person's inner world. Freud considered projection the main mechanism underlying

psychopathogenic disorders such as paranoia, but he also applied his concept of projection to other areas of behavior, not necessarily pathological, such as religious beliefs (Freud, 1928).

In Totem and Taboo (1938) Freud assumes that memories of percepts influence perception of contemporary stimuli. He states:

> But projection is not specially created for the purpose of defense, it also comes into being where there are no conflicts. The projection of inner conceptions to the outside is a primitive mechanism which, for instance, also influences our sense-perceptions, so that it normally has the greatest share, in shaping our outer world. Under conditions that have not yet been sufficiently determined even inner perception of ideational and emotional processes are projected outwardly, like sense perceptions, and are used to shape the outer world, whereas they ought to remain in the inner world. (p. 857)

These defensive mechanisms may be of a conscious nature, such as suppression, or of an unconscious nature, such as denial, repression, reaction-formation, or projection. They serve to protect a person from unacceptable, unmanageable, or too painful feelings and thoughts (Freud, 1938).

Projection, as defined by Healy, Bronner, and Bowers (1930), is also related to psychopathology: "A defensive process under sway of the pleasure principle whereby the ego thrusts forth on the external world unconscious wishes and ideas which, if allowed to penetrate into consciousness, would be painful to the ego" (p. 480).

All manifestations of behavior, from the most to the least significant, express an individual's personality; whereas projection, in the sense as it is stated above, appears related only to psychopathology. Rapaport (1947) posits examples of the projective hypothesis such as are shown by the way people express themselves via their personal dress and how they furnish their homes. Based on this assumption, Korner (1950, 1965) maintains that any behavior sample elicited by any technique is potentially capable of projecting individual personality.

Assumptions of Projective Techniques

The basic assumptions of projective techniques are (Korner, 1950):

1. The most and least significant behavioral manifestations are expressive of the individual personality.

2. Involvement with projective devices provides information that would not, or could not, be otherwise obtained.

3. Due to psychic determinism, responses to projective techniques will not be chance events.

Murstein (1961, 1965) offers a more extensive outline of projective techniques, along with discussions of their validity based on experimentation. He assumes:

1. The more ambiguous the stimulus of the projective technique, the more the response reflects the perceiver's personality.

2. The more similar the stimulus is to the individual, the greater the degree of projection.

3. The strength of a need is manifested directly or symbolically through the projective technique.

4. Projective test behavior and individual behavior are parallel.

To the above, Murstein added corollary assumptions formulated on a central tenet of projective testing: Individuals project their inner needs, desires, and conflicts in the process of giving meaning or order to ambiguous stimuli (Lindzey, 1952). He further elaborated that an individual's response to a projective technique is a function of the properties of the projective stimulus, the perceived purpose of testing, the individual's expectation, and the examiner's instructions and interpersonal biases (Murstein, 1961).

By utilizing the principles of psychoanalytic theory and projection, psychologists commenced looking for methods of diagnosis and evaluation of both psychopathology and psychonormalcy. This led to the development of such projective instruments as Herman Rorschach's inkblots, The Thematic Apperception Test, The

Roberts Apperception Test, Gestalt techniques, sentence completions, and drawings, such as the KFD, HFD, and HTP.

In utilizing these diagnostic/evaluative instruments, a subject is presented with unstructured, ambiguous stimuli. The object of this is to prevent stimulation toward any specific direction that might evoke any specific response. The desired goal, in harmony with the theory of projective technique, is to allow the subject person freedom of content and direction in formulating answers.

The theory of projection assumes that the subject's answers encompass material important and unique to self. Thus the subject projects his or her own overall organizational style and view of environment. The subject visually and vividly outwardly projects thoughts, concepts, and desires of the inner self. Rapaport (1952) summarized this concept of projection:

> Each individual has a private world which is structured according to the organizing principles of his personality, and projective testing studies these organizing principles by inducing the subject to bring them to bear upon more or less unstructured material, incorporating it into his private world. (p. 270)

There are varied and different categories of projection, but it is the externalization of inner percepts that closely characterizes the sense of projection inherent in projective techniques (Bellak, 1944; Holmes, 1968; Juni, 1980; Murstein, 1957).

A subject probably does not externalize a specific tension. Frank (1939, 1948) reasons that the externalization implicit in projective techniques is more broadly based: A person "projects" personal needs, motivations, and unique tendencies constantly as the self perceives or responds to the environment. A real life circumstance or projective technique, in any situation, may evoke a person's idiomatic style of response. This response style is the basis for inferring information unique to the individual's own personality processes.

Several writers question the assumption that projective materials are primarily the expressions of the unconscious processes (Coleman, 1969; Hanfmann & Getzels, 1953; Miale, 1961; Stone & Dellis, 1960). Perception of certain elements in the unorganized stimuli of projective measures can cause subjects to free associate to earlier percept memories. Harris (1963) asserts that what the subject projects onto the materials set before him or her are the meanings aroused by associations. These associations come from elements common to the current experience or from previous, possibly more highly organized, experiences. This is because subjects perceive certain elements involved with unorganized stimuli of projective measures, and free associate to earlier percept memories in order to "see" the likeness to some other object. Children draw what they know and feel, not what

they see (Koppitz, 1968; Luquet, 1913). The goal of a subject doing projective drawings is "mental realism" not "objective realism" (Naumberg, 1955).

Defensiveness in varying degrees will come into play, and children, according to their ages, will respond differently (Burns & Kaufman, 1972). Because their defense mechanisms are not well formulated or established, young children are apt to be more open, although their responses may be altered by fear, guilt, reward, or punishment. Upon reaching puberty, adolescents become more self-conscious, have a greater need for peer approval and acceptance, and thus incorporate more defensiveness. Addressed by issues of abuse and sexual concern, adolescents, and even younger children, may find it difficult to be completely honest and open when faced with fear, threats, guilt, or shame (Miller, Veltkamp, & Janson, 1987; Summit & Kryso, 1978).

Projective techniques, including drawings, appear to confirm these concepts of defensiveness. For example, a young child who renders a simple drawing or story is not as embarrassed by details as is an older child. Through their drawings, younger children may be able to present information or themes they are unable to verbalize due to lack of language skills, fear, or bribery. It is through these projections that children may be able to reveal past and present experiences of significance (Koppitz, 1968;

Miller et al., 1987). With maturation, children gain knowledge and social skills as they develop more sophistication in their conscious or unconscious defenses. Because of their defensiveness, the drawings of more mature subjects may appear impoverished by lack of major items and detail--things that might normally be included in harmony with their age and level of development.

In this vein, Rodgers (1992) states:

> While some children become more defensive, less communicative, and attempt to keep secrets, others may become very angry and choose to shock or ask for help via drawings. The context of these drawings would be expressive of experience or emotions with which they are concerned, such as aggression, fear, or sexual experience. (p. 12)

Through projective techniques, individuals, including children, express in nonthreatening and symbolic ways the attitudes, experiences, and conflicts that are personally vital to them at any given time (Frank, 1948; Freud, 1938). Through these techniques, researchers and therapists are enabled to penetrate the individual's inner world, to establish communication, and to learn what the person may otherwise be incapable of communicating.

Projective techniques such as the KFD have been used to gather information in child abuse cases. The KFD has been found particularly helpful in working with children from abusive families by revealing valuable information about both family members and relationships

(Burns, 1982). In evaluating child incest victims, KFDs were more revealing than static drawings because they included action and elicited effect (Mayer, 1983). When parents of abused children drew KFDs, Schornstein and Derr (1978) found this projective technique was useful in assessing family relationships and determining how family members perceived each other. Burns (1982) found parents' KFDs revealed developmental problems in child-rearing practices.

O'Brien and Patton (1974) devised an objective scale for assessing the KFD. They sensed a need for assisting mental health professionals in objectively evaluating children's drawings and understanding family dynamics. Citing the possibilities for research by using this objective scale, Burns (1982) stresses that there are practical uses for the KFD in connection with child abuse, family counseling, and the evaluation of therapeutic effectiveness.

Finkelhor (1984) recommended studies of this type:

> Research on child sexual abuse is so badly needed that it is hard to think of any kind of study that would not be welcome. . . . Nonclinical populations--students, organization members, professionals, whole communities--can be sampled and the victims of sexual abuse compared with nonvictims on a wide range of suspected or possible risk factions. (pp. 227, 230)

Significance of the Study

Since KFDs, HFDs, and other types of projective drawings have been used with studies of sexually molested children, it remains to be determined if such projective instruments can also be beneficial in working with sexual offenders. Consequently, this study will provide information that will be useful to mental health professionals in gaining insight into projective techniques for detection, diagnosis, prevention, and therapy.

Deliminations of the Study

Subjects for this study were limited to:

1. Individuals living in Western Oregon and Southwestern Washington
2. Child and adolescent males between 8 and 17 years of age
3. Two volunteer subject populations:
    a. a normal population from area schools
    b. a population of known sexual offenders.

Definition of Terms

Human Figure Drawing (HFD) is the technique whereby by drawings of whole human figures are analyzed as a pro-jective technique to determine signs of unconscious needs, conflict, and personality traits. An HFD may also be used for a developmental test of maturity (Koppitz, 1968).

Juvenile Sex Offender is defined as a minor who commits any sexual act with a person of any age (Ryan & Lane, 1991, p. 3):

1. against the victim's will

2. without the victim's consent

3. in an aggressive, exploitive, or threatening manner.

Juvenile Sexual Offenses (Ryan & Lane, 1991):

> may be characterized by one or more of a wide array of behaviors, and multiple paraphilias (more than one type of deviancy) may be seen in a single individual. Molestation of younger children or peers may involve touching, rubbing, disrobing, sucking, and/or penetrating behaviors. (p. 3)

These juvenile sexual offenses may include:

1. Rape, which is any sexual act perpetrated with violence or force; legal definitions often include penetration. Penetration may be oral, anal, or vaginal and digital, penile, or objectile.

2. Hands-off offenses include:

    a. exhibitionism, which is the exposing of one's genitalia

    b. voyeurism, which is observing others without their knowledge or consent

    c. frottage, which is rubbing against another

    d. fetishism, such as stealing underwear or masturbation in another's garments

    e. obscene communication, such as obscene

phone calls, and verbal or written sexual harassment or denigration.

Kinetic Family Drawing (KFD) utilizes family drawings from subjects by asking them to "draw everyone in your family doing something." This projective technique provides understanding and insight into both the subject drawer and his or her family dynamics (Burns & Kaufman, 1972).

Sexual Molestation is "the involvement of dependent, developmentally immature children or adolescents in sexual activities that they do not understand, to which they are unable to give informed consent, or that violate the social taboos or family roles" (Schechter & Roberge, cited in Kempe & Kempe, 1984, p. 9).

Sexual offense or molestation is a legal concept, while sexual deviation is a psychological one. Nicholas Groth and Frank Oliveri (Sgroi, 1989) amplify this:

> The term sexual deviation generally refers to a persistent, predominant, and unconventional sexual interest on the part of an individual either in regard to a particular type of sexual activity or toward a particular type of sexual object or individual. Sexual abuse refers to any form of nonconsenting interpersonal sexual behavior that poses some risk of harm to the other individual. . . . The legal concept of sexual offense, then, addresses the manifest sexual behavior in regard to the law; the psychological concept of sexual deviation relates to an individual's sexual nature or orientation; and the clinical concept of sexual abuse has reference to the impact on the victim of involuntary and nonconsenting sexual activity. (pp. 310-311)

Organization of the Dissertation

This dissertation is organized into five chapters:

Chapter 1 includes the introduction, statement of the problem, research questions and hypotheses, theoretical framework, importance of the study, delimitations of the study, definition of terms, and the organizational outline of the dissertation.

Chapter 2 reviews the literature on juvenile offenders, Human Figure Drawings, and Kinetic Family Drawings.

Chapter 3 describes the proposed sample groups, instrumentation, field procedures, methods of data collection, null hypotheses, and analysis of data.

Chapter 4 presents the data and statistical analyses.

Chapter 5 summarizes the study, presents the findings, and gives recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Caleb Carr (1994) asserts that child sexual abuse in America is not a new phenomenon, for child prostitution and child abuse were widespread in New York City during the last quarter of the 19th century. Unlike today, however, there were taboos against the subject in the press and polite conversation. One reason abuse was so rampant was due to the lack of laws protecting children.

Legislation to protect children began in England during the 1830s. Carr reports the position of children in that country was so bad it was considered a great triumph when the legal age for prostitution was raised from 9 to 13 years of age.

During that same century, children were at greater risk in America. In 1869, about 30,000 children lived on the streets of New York, often turning to prostitution for survival. "Street Kids" hung out in bars and brothels, where as late as 1896, girls and boys of 10 or 11 were recruited as prostitutes. Carr cites the 1871 "Mary Ellen" case of a battered and sexually abused girl

who sought protection from the Society for the Prevention of Cruelty to Animals because there was no such organization to protect children. Thankfully, the situation has greatly improved, for effective child labor and welfare laws were passed in the 1920s and 1930s.

Child sexual molestation has probably existed from the beginnings of human existence. Western society has been historically repressive in its societal values and attitudes towards human sexuality. For this reason, discussion concerning the problem of child sexual abuse has been limited both by the general population and by the mental health professionals (Haciak, 1993).

Social conversation pertaining to child sexual abuse has progressed from almost complete silence to being more readily acceptable by the general population (Herman & Hirschman, 1981). Beginning in the 1970s, victims of child sexual abuse initially drew primary research attention by professionals, followed by focus on the perpetrators of child molestation (Earls, 1983). The 1980s broadened our view of the problem. Child victims are being identified at younger and younger ages, and the more we learn about the nature of their abuse, the more difficult it is to contemplate or understand. Some professionals believe boys may be sexually molested as frequently as girls but are at far greater risk of not being identified as victims of molestation (Porter, 1986).

During the 1980s, our nation became increasingly aware of the seriousness of the problems arising from sexual victimization and abuse. Sexual assault is a very complex, multi-determined problem that is not exclusively within the province of any single discipline. The issues are manifold: cultural, social, political, economic, legal, medical, psychological, educational, and spiritual. Because it is so complex, a multi-disciplinary approach is required to effectively combat sexual victimization and abuse (Sgroi, 1989). Limited available information regarding persons who commit such offenses presents us with a major obstacle in addressing the problem of sexual abuse.

According to Jan Hindman (1991), that while the decade of the 1980s brought increased awareness of the magnitude of sexual abuse, this is counter-balanced by the possibility that

> many erroneous, although perhaps well intentioned, ideas about solutions to the problem have surfaced. At times, these unfounded perspectives have caused conflict and confusion, but most importantly, these ideations contribute to poorly designed treatment plans for desperate victims. Few emerging philosophies that guide many treatment programs have been founded on research and data. What has been accepted in the field and what is rejected as erroneous, is often based on nothing more than clinical impression.
>
> Among professionals, responses and reactions to sexual abuse vary between horror and disbelief. Efforts are often exerted to avoid the problem or discount the reality of sexual abuse. Because of intense emotional reactions to sexual exploitation, ignorance and misinformation often pervade. Since it is often difficult for those individuals who do not

> molest children to understand reasons or etiology for those who do molest children, it is likely that erroneous ideas emerge as not only acceptable, but as accurate and factual information. Before responsible intervention can occur for victims of sexual abuse, misinformation must be dispelled and discarded. Inappropriate information must be discarded so that adherence to proper treatment protocols can be accepted without interference from old and archaic ideas. And utmost important, objective research and data should be used to determine which ideations must be dismissed and which should become the tools for healing. (pp. 7-8)

History of Sex Offender Research

Sigmund Freud is the earliest psychological writer noted for attempting to account for reports by children that they had been sexually abused (cited in Herman & Hirschman, 1981). He approached child sexual abuse within a broad concept of internal conflicts, which he believed resulted from adult-child familial relationships. Fancher (1973) analyzed Freud's writings and concluded he interpreted the reports of sexually abused female children as being manufactured stories representing hysterical responses to their internal conflicts. He believed children's reports of their sexual abuse were symptoms of their underlying neurotic tendencies. Freud, it is proposed, did not inquire into the factual basis of these sexual abuses reported to him because of the internal conflicts and discomfort he himself experienced about the claims.

Societal pressures of Freud's time may have also led him to avoid addressing child sexual abuse (Fancher,

1973). If that is the case, he inadvertently contributed to the denial of such abuse by intellectually accounting for the allegations while assigning a diagnosis for the victim. Such a response would not be uncommon, because it exemplifies how a person's emotional defenses can surface when confronted with the reality of child sexual abuse. Masson (1984) theorized that Freud initially believed that child sexual abuse was the cause of hysteria in his clients. This theory was later revised by Freud because he had difficulty in accepting the prevalence of incest, which was socially unacceptable at that time, and possibly because of his personal awareness of his incestuous desires for his daughter Anna.

Kinsey, Pomeroy, and Martin (1948) formalized research into sexually deviant behavior by their pioneer study of human sexuality. Prior to their publication of Sexual Behavior in the Human Male, studies of human sexual behavior were randomly and loosely structured, anecdotal in nature, and involved small population samples (Lanyon, 1986).

Although much research has been conducted to determine the incidence of adult and adolescent sexual offenders being victims of sexual abuse themselves, it is difficult to estimate the rate, because estimates vary from 10% to 80% (Burgess, Hartman, & McCormack, 1987; Gil & Johnson, 1993; Groth, 1979; Longo, 1986). We have

learned much about the effects of sexual abuse from treatment programs for child victims and their families (Conte & Berliner, 1988; Wyatt & Powell, 1988). Research and treatment programs for adult survivors of sexual abuse have also taught us much about child sexual abuse (Briere, 1989; Briere & Runtz, 1988; Lew, 1990). It is noteworthy that all victims of childhood sexual abuse do not become offenders.

We still have much to learn about the differential effects of sexual abuse on children and their molesters. Cunningham and MacFarlane (1991) write:

> We know that its impact varies greatly depending on such factors as the nature and duration of the abuse, the age of the child at onset and at disclosure, the degree of violence or coercion, the relationship between child and the abuser (including the child's needs for affection, approval, etc., that are being met and manipulated by the abuser), and the actions and reactions that follow discovery. We do not know how these various factors relate to one another or how to assess their potential impact in relation to a particular child. We do not know all the reasons why some victims seem to recover or respond better to treatment than others, or why some who were less "severely" abused may suffer more than others who appear to have been more traumatized over longer periods of time. We know that many adult perpetrators were sexually abused as children (Groth, 1979). However, given the high prevalence of abuse indicated by retrospective research (Peters, Wyatt, & Finkelhor, 1986; Russell, 1984), we can only assume that most victims do not become perpetrators. We don't have the answers yet to why some child victims grow up and become abusive while others do not. We also don't know why some offenders appear to have no sexual abuse or maltreatment of any kind in their backgrounds [italics added]. Our knowledge about those who are sexually attracted to and take advantage of children who are younger, weaker, smaller, or more naive has increased enormously in the past 20 years, but it is a field of study and practice that is young. (pp. 11-12)

Due to unknown variables, the incidence and prevalence of sexual offenses are difficult to determine precisely. For centuries the taboo against incest prevented disclosure more effectively than it prevented its occurrence. Sexually abused victims often do not report their victimization because: (1) they are often made to feel guilty or responsible for their victimization; (2) they fear publicity; and (3) they do not want the accompanying trauma of testimony in court. Males who have been sexually victimized as children or adolescents are socialized against reporting their abuse; whereas women, having become more assertive in recent times, are increasingly disclosing, thus providing more data for the prevalence of sexual molestation (Ryan & Lane, 1991). Kempe and Kempe (1984) estimate 4 million women in America were sexually abused in childhood.

How common is child sexual abuse? Recent statistics indicate 1 in 5 of all American families is involved in some form of child abuse. Leading authorities believe 1 in 10 families is involved in incestuous abuse (Allen-Baley, 1983). Researchers estimate for every case of incest reported, at least 25 cases remain hidden (Mayer, 1985). Although the rates of child sexual abuse in the general population may vary by definition of victimization, methods of data collection, and sample

sources, it appears that the averages are 21% for females and 7% for males (Finkelhor, 1986).

Finkelhor and Dzuiba-Leatherman (1994) maintain that children suffer more victimizations than do adults. They cite the 1990 National Crime Survey that found the rates of assault, rape, and robbery against 12- to 19-year-olds to be 3 times higher than for the adult population as a whole.

Kilpatrick (1992) found in a national survey of adult women that 60% of rapes occur before the victim reaches 18, making rape a 5-fold higher risk for children.

In their March 1994 article in the American Psychologist (pp. 173-183), Finkelhor and Dzuiba-Leatherman cite the following statistics for victimization of children ages 0 to 17 years: In 1986 the rate per 1,000 was 2.6 with a total of 133,200 being victimized. In 1991 the rate per 1,000 rose to 6.3 with a total of 404,000 being victimized. The 1986 data were taken from the National Study of the Incidence and Severity of Child Abuse and Neglect, 1988 (Sedlak, 1991), and the 1991 data came from the Annual Fifty State Survey, 1990 (Daro & McCurdy, 1991).

Finkelhor and Dzuiba-Leatherman, in the same article, also cite their data from the Los Angeles Times poll of 1990, which indicates females have a 2 to 3 times

higher rate of being sexually abused than do males during the approximate ages 4 to 16.

Although these statistics indicate a higher rate of sexually abused females, current epidemiological studies point to boys being at greater risk for sexual exploitation than was previously known (DeJong, Emmet, & Hervada, 1982; Ellerstein & Canavan, 1980; Finkelhor, 1979, 1984; Reinhart, 1987; Spencer & Dunklee, 1986). These same researchers have found that molestations of male children are most often committed by adult male offenders.

Finkelhor and Dzuiba-Leatherman (1994) claim the victimization of children is common because of: (1) their weakness, small stature, and dependency due to their inability to retaliate or deter their victimization as effectively as those with more strength and power; (2) the social toleration of child molestation; and (3) comparatively little choice with whom they associate (e.g., if children live in an abusive situation, they are often not at liberty to leave). It can be said that "the main status characteristic of childhood is its condition of dependency, which is a function, at least in part of social and psychological immaturity" (p. 177).

Increased incidence and prevalence of child sexual abuse is evident. In the 1960s, laws were passed requiring that child abuse be reported. These laws were

amended in the 1970s to address the needs of child sexual abuse victims for purposes of identification, intervention, and protection (Ryan & Lane, 1991). The number of reported cases of sexual abuse has increased 200% since 1976 (Kempe & Kempe, 1984). This represents only a fraction of actual sexual abuse cases, because each year large numbers go unreported (Kempe & Kempe, 1984; MacFarlane et al., 1986).

Reports of child sexual abuse have risen at an alarming rate, apparently due to the public's awareness of its devastating impact on society and individuals (Ryan & Lane, 1991); still, it is difficult to develop accurate estimates in the United States. Some estimates of those victimized as children are: (1) 20% to 50% of all women (Alter-Reid et al.,1986) and (2) 1 in 6 Americans--as many as 40 million (Kohn, 1987). Russell and Trainor (1984) reported that in 1976 only 3.2% of all child abuse reports were confirmed as sexual abuse cases, but by 1982 confirmed cases had risen to 6.9%. A study by the National Center on Child Abuse and Neglect (1984) estimated 2.25 million cases of child abuse were reported and over 1.5 million cases were confirmed. This was an incidence rate of child sexual abuse at 2.5 children per 1,000 per year, a tripling of reported incidence since 1980.

Most materials written about sexual offenders refer to adult sexual offenders; however, the study of young offenders is increasing.

The National Task Force on Juvenile Sexual Offending (Ryan & Blum, 1993) defines a child perpetrator as "a child under age 12, who engages in sexual behavior which is unlawful or harmful due to intimidation, coercion, or force, inequality, abuse of authority, or lack of consent" (p. 17).

In the professional community sexual abuse by adolescent offenders is receiving increasingly greater attention. Historically, the existence of child sexual offenders has been largely dismissed or denied (Johnson, 1988a). The National Center limits its study data to cases of child sexual abuse dealt with by child protective agencies; as a result, the magnitude of the problem is only partially indicated, and its incidence and prevalence are not fully defined. This is particularly relative in calculating the incidence of sexual abuse of children by juvenile offenders. Such cases are not included in social service intake criteria, because all extrafamilial or third-party cases are referred to law enforcement and/or criminal justice systems (Ryan & Lane, 1991). Because only a minority of juvenile sexual offenders involve sibling incest, this is noteworthy.

The National Adolescent Perpetrator Network sampled 1,000 juvenile offenders in developing the Uniform Data Collection System. The Network found 38.7% of the cases involved siblings and 15% involved crimes against peers or older individuals. This leaves 46.2% that involved offenses against children not related to the juvenile offender, such as friends, neighbors, or acquaintances--cases not apt to be investigated by social services. Although the sample has much data, it does not give accurate knowledge concerning the incidence or prevalence of sexual abuse. The data are from a pool of multiple providers in many states, but not from every provider in any one state. There is concern that sexual abuse is underreported because the majority of the juveniles were referred for "first offenses," but their average number of victims was seven. Obviously many unreported offenses had occurred (Ryan, 1988).

According to Ryan and Lane (1991), Federal statistics are not a reliable source for determining the incidence or prevalence of juvenile sexual offending. Citing the FBI Crime Index, they state that as late as 1985 the FBI identified rape and "other sexual offenses" only on cases charged, prosecuted, and found guilty. This is undependable data since much juvenile perpetration of child sexual abuse either goes undetected, never comes to the criminal justice system, is referred to diversionary

programs for treatment under the condition no charges are filed, or is dismissed from prosecution for a variety of reasons.

Self-reports of past and present victims and offenders probably are the most reliable sources of data on child sexual abuse. Timnick (1985) reports the results of an anonymous telephone survey taken by the Los Angeles Times. A random sample of over 2,600 American adults indicated that 22% of the population admitted to being sexually abused by age 18 (16% of males and 29% of females). Although the Times poll does not indicate cases involving juvenile offenders, other studies show that teenagers comprise at least 55% of reported sexual offenses of male children (Showers, Farber, Joseph, Oshins, & Johnson, 1983). It can be estimated that 8% of all males in the general population are sexually abused by a juvenile prior to age 18 (Ryan & Lane, 1991).

Since the early 1980s we have become aware that a significant portion of the sexual abuse of children is committed by other children and adolescents. Statistics of sexual abuse of juveniles indicates that they contribute 56% to 57% of sexual abuse of boys and 15% to 30% of sexual abuse of girls (Ryan & Blum, 1993).

With 15% to 25% of female sexual abuse victims being molested by juveniles (Farber, Showers, Johnson, Joseph, & Oshins, 1984), it is estimated that in 1986

60,000 to 110,000 girls were victims of juvenile sexual offenders. This means that of all females, 5% to 7% of those under age 18 were victimized by juveniles (Ryan & Lane, 1991).

Recent statistics from widespread areas across the United States reveal the following:

1. In 1983, California Department of Youth Authority reported 2,875 felony and 4,500 misdemeanor arrests for sexual offenses by persons less than 20 years of age.

2. In 1984, Vermont reported 161 known juvenile sexual offenders representing 1.6 sexual offenses committed per year per 1,000 juveniles ages 5 to 17 years.

3. In 1985, Colorado reported that over 50% of juvenile male sexual abuse victims (190 cases) and that approximately 20% of juvenile female victims (345 cases) were likely attributable to juvenile offenders.

4. In 1985, Oregon reported 1,000 sexual offenses committed by juveniles representing 2.0 sexual offenses per 1,000 juveniles.

5. In 1987, Washington's Pierce County reported 2.45 sexual offenses per 1,000 juveniles during the previous 2 years. Snohomish County reported 3.5 per 1,000 during the same time period.

6. In 1988, Michigan completed a survey of juvenile sexual molestations that indicated that 85% involved

victims younger than the offender. Data drawn from various sources in 1985 (Child Protective Services, Community Services, Juvenile Courts) found that more than 50% involved victims 10 or more years younger than the perpetrator in 731 cases out of 1,178 referrals. Only 6% involved same-age peers and 8.3% were against an older person.

The data from these several more-specific studies lend support to the conclusion that juvenile sexual offending is alarming in magnitude, with the most vulnerable age period of victims being between ages 9 and 12 (Kempe & Kempe, 1984). Ingrassia, Annin, and Biddle, in Newsweek (July 19, 1993), cited FBI statistics showing that adult sexual offenses rose by 3% between 1990 and 1991, while the offenses by adolescents were 3 times higher during the same period.

Most professionals (Gil, 1987) agree that (1) although most reports are made about boys who sexually molest, girls may also molest children, and even though most sexual offenses are committed by boys and men, it is crucial to identify girl and women offenders as well; and (2) until recently young sexual offenders were referred to as "adolescent sex offenders," but it is now known that more and more referrals involve children who are preschool (0-5), latency age (6-12), and young adolescent children (13-18). Children as young as 1 1/2 years of age have

been reported for molesting young children.

According to several researchers (Abel, Mittelman, & Becker, 1985; Ryan & Lane, 1991), the modal juvenile offender is: male (91-93%), age 14 years, and living with two parents at the time of offense. The offender is unlikely to have had any previous convictions for sexual assault, but it is quite likely that the current conviction does not represent the first offense/victim. There is one chance in three of the offender having a prior conviction of nonsexual delinquent behavior.

Juvenile perpetrators appear to be from all racial, ethnic, religious, and geographic groups in approximate proportion to these characteristics in the general population. Most juveniles (70%) who sexually molest live in two-parent homes at the time they are discovered as offenders, with over half of them reporting at least some parental loss, such as from divorce, illness, death, out-of-home placement or adoption (Ryan & Lane, 1991).

We can therefore conclude that persons who sexually abuse children can be: male or female, from any racial or ethnic group, tall or short, bright or dull, well educated or ignorant, spiritually devout or irreligious, law abiding or criminal. They come from the whole population spectrum. Although they must have

psychological motivations for committing their molestations of children, there are no currently proven psychological profiles differentiating child sexual molesters from those who do not molest.

According to Ryan and Blum (1993), historically aggressive or exploitive behaviors in childhood have not been dealt with in an accountable manner. Many times adult responses have been non-specific, disciplinary, punitive, or minimizing measures that have failed to confront exploitive behaviors or to teach appropriate behavior. Often responses to childhood sexuality, as well as responses to aggressive or exploitive sexuality, have not promoted communication or understanding at a cognitive level but rather have led to secrecy at a behavioral level. Many adult and adolescent sexual offenders have recalled that society often minimized the existence or importance of early abusive behaviors as much as they did themselves.

Because the clinical data pertaining to the treatment of sexual offenders or their victims are so sparse, it is incumbent on mental health professionals to collect such data in ways that precisely define the progress of treatment and outcomes. This is the way research will guide us to provide better treatment, rather than merely satisfying a technological imperative to collect data regardless of their relevance (Sgroi, 1989).

Sexual offenses have been reported by child perpetrators as young as 5 and 6. Although treatment of juvenile sexual offenders has focused on 12- to 18-year-olds, recent data indicate that children with sexually exploitive and aggressive behaviors are also in the prepubescent and latency age range (Cavanagh-Johnson, 1988; Issac, 1986).

There is a growing technological imperative to perform psychological tests on sexual offenders, with the wish or belief they will have recognizable psychological profiles differentiating them from the rest of society (Sgroi, 1989). If psychologists were able to predict with some accuracy who would become a sexual offender, we could more confidently develop early interventions and treatment programs.

A variety of factors seem to put children at risk to develop deviant sexual behaviors (Ryan & Blum, 1993, p. 5). These factors are: sexual victimization, non-normative sexual environment, and sexualized models of compensation combined with (1) unempathic parenting, (2) inconsistent care, (3) parental loss, (4) lack of a confidant, (5) attention deficit/affective disorders, (6) poor social skills, and (7) poor self-image.

As the problems with sexually abusive youth have increased, many clinicians working with adolescents have become increasingly aware that sexually abusive behaviors

do not suddenly appear in adolescence but rather have developed over time--often from early childhood. Some of these teenagers in treatment have been able to identify, retrospectively, that their abusive patterns of thinking and behavior were present as early as age 5 (Ryan & Blum, 1993).

Educators and caregivers have had no information as to how these behaviors develop, much less how to interpret their development (Ryan & Blum, 1993). Histories of sex offenders demonstrate childhood abuse and dysfunctions from early childhood on, which include disruptive and antisocial behaviors, sexual acting out, school failures, and poor interpersonal relationships.

Although the majority of sexual offending juveniles attend school and achieve at least average grades, a significant number have been identified with special problems, such as learning disabilities, special education needs, truancy, or behavior problems. They also have the range of social characteristics common to every type of juvenile: tough delinquent, the undersocialized, the social outcast, the popular star, the athlete, and the honor roll student. Although less than 5% of juvenile molesters have been identified as mentally ill, there may be an over-representation of emotional-behavioral disorders and affective or attention-deficit disorders (Ryan & Lane, 1991).

According to Ryan and Lane (1991, p. 7), "children provide easier targets for the sex offenders as they seek out the attention of the molester or be left in the care or company of the offender by unsuspecting adults." For this reason, it is estimated that over 95% of sexually abused children know their perpetrator as an acquaintance, friend, neighbor, or relative. It is found that the majority of sexual offenders likely witnessed sexual abuse, or have been sexually abused in their own homes, or in foster homes, or in the institutions where they have been kept (Sgroi, 1989).

Juveniles who begin molesting/raping often exhibit poor self-esteem, distorted thinking patterns, and major dysfunctions in many areas of their lives. They are at risk of becoming habitual offenders and requiring treatment and/or incarceration as teens and as adults, as well as victimizing countless others in their lifetime (Ryan & Blum, 1993).

Behavioral Indicators of Child Sexual Abuse

Characteristics of children who molest are (Gil, 1987): being in denial, immaturity, lack of social skills, low self-esteem, sexual confusion/stimulation, and learned sexual behavior.

According to Toni Cavanagh-Johnson, Ph.D. (Gil & Johnson, 1993), juvenile sexual offenders are a

heterogeneous group, although it is possible that some subsets of children have hormonal excesses. Such an example is sexually preoccupied children who: bribe, cajole, and threaten other children into sexual interactions. These children describe their behavior as "striving for pleasurable feelings." Johnson describes this category of molesters as having more highly developed fantasies; they do not seem to be aggressive, but are mainly sexual with pleasurable aims. If they themselves were molested, they will describe their experience as pleasurable. Such offenders are often very difficult to supervise because they do not desire to stop their sexual behavior.

Many adult offenders began their sexually abusive behavior when they were adolescents (Longo & Groth, 1983). The majority of the adjudicated sexual offenders studied by Longo and McFadin (1981) began their deviant sexual behavior during their adolescent years, some as early as age 7. Other researchers believe that the addictive, compulsive quality of the behavior associated with child molestation usually occurs for years prior to its identification (Abel et al., 1984) in spite of the fact that an increasing number of victims are reporting being molested by juveniles.

Oregon therapist, Jan Hindman, specialist in treatment of both sexual abuse victims and perpetrators

(Hindman, 1988), compiled data from 1980 to 1988 concerning adult child molesters' statements regarding the number of victims, whether they were sexually abused as children, and whether they committed sexual offenses as children. One of the first steps in Hindman's treatment program was to write a detailed sexual history. She began polygraphing in 1982. Since then, offenders were told that if they did not pass the polygraph examination, they would be sent back to jail. They were given immunity for past sexual crimes admitted during this process. The polygraph deals with questions about purposely withholding or misconstruing information, but not directly about abusive behavior or experience of abuse as children. Self-reports given prior to the beginning of polygraphing in 1982 and self-reports given after the beginning of polygraphing vary greatly. The data clearly show that when they knew they would go to jail if they failed the test, they admitted six times as many victims. Pre-1982 polygraphs, 67% claimed being victims of sexual crimes as children, and only 29% admitted committing abuse as children. When they were subjected to polygraph verification, the numbers were reversed when 29% claimed victimization as children, and 71% admitted committing sexual offenses as children. Contrary to the widely held notion that most men molest because they are former victims of abuse and are reenacting what occurred to them,

this suggests these men were abusing as children rather than being victims. Hindman's findings strongly indicate that more research is needed about why men molest, before we make policy decisions based on old assumptions.

Ryan and Lane (1991, p. 7) found that "many juvenile sexual offenders abuse the same victim on more than one occasion, sometimes over a period of months or even years prior to disclosure or discovery." These authors believe that although recent public awareness of sexual molestation fosters juveniles being apprehended after their first offense, many others have multiple victims prior to their first arrest. While the average number of victims of juvenile sexual offenders is 7, some have disclosed 30 or more victims; however, the younger a perpetrator is identified, the smaller the number of victims and/or offenses.

Although it has been previously stated (p. 40) that "there are no currently proven psychological profiles differentiating child sexual molesters from those who do not molest," Groth and Oliveri (cited in Sgroi, 1989) assert:

> Sexual offenders differ from nonoffenders only in regard to certain aspects of their unconventional interest or activities. Knowledge of a person's sexual interest, desires, and behaviors does not in itself reveal the nature of his character or personality. There is a great deal of sexual diversity among human beings, and people differ from each other in several basic ways with regard to their sexuality. (p. 312)

They state these basic differences to be: sexual orientation, frequency of sexual behaviors, and attitudes toward sexuality.

Characteristics of Children Who Molest

According to Gil and Johnson (1993) there are numerous and varied characteristics of juvenile sexual offenders. Generally these can be placed in three categories: characteristics of family and environment, characteristics of parents, and characteristics of the children.

Research at the Massachusetts Treatment Center revealed powerful predictors of sexual aggression. Institutionalization, combined with the family dynamics of sexual deviancy or abusiveness that increased the probability of early or prolonged institutionalization, increased the likelihood of extreme sexual aggression. A void left by disrupted or unformed relationships may be filled with sexually pathological experience (Prentky & Cerce, 1989).

Characteristics of Family and Environment of Children Who Molest

1. Child rearing is very rudimentary and generally based on an authoritarian model.

2. Families in which children who molest are raised have extreme difficulties in their relationships.

3. Families and homes generally are very unstable.

4. Emotional life is chaotic.

5. Relationships between family members are highly stressed and distressful.

6. Adults cannot depend on children to tell the truth, and children cannot depend on adults to be consistently truthful.

7. There is a history of substance abuse in the majority of the families.

8. Healthy adult relationships are virtually absent.

9. Positive male and female role models are almost nonexistent. Negative relationship models, including role reversals, are standard in children who molest.

10. There is a preponderance of single-parent families; usually the mother is the sole parent. There is a very large number of divorces, relationship of convenience, and parent separations. Many of the mothers have a series of boyfriends who live with them for a period of months or years. Many times the men who drift in and out of the lives of these mothers and children are physically abusive to the mothers, and the children witness this abuse.

11. Frequently, children who molest other children have had multiple placements outside the home.

12. Families in which children who molest are raised have extreme difficulties in their relationships. The emotional and sexual nature of the adult-child relationships and relationships between adults show vast disturbances.

13. Adolescent perpetrators may come from sexually repressed, "sex is dirty" homes with overt values and covert norms. The family systems seem to have an inordinate preoccupation with sex. Family members use sexual language, make sexual innuendos and double entendres, sexualize their intimate contact, respect few if any boundaries, stimulate each other with sexual information, and receive a great deal of sexual information from pornographic videos and magazines, and generally have a heightened sense of sexual arousal from the environment.

14. Child sexual molesters come from homes: that are sexually and emotionally needy; that are socialized to sex and aggression occurring in tandem; where sex is an exchange commodity; and where messages of sexuality are violent and debasive, with children's naked bodies being used as a weapon, a commodity, or as vehicles for adult

pleasure. The homes are sexually abusive, often over multigenerations. Children learn that anxiety, attention, anger, rage, and cruelty are ultimately associated with sex, while the meaning of love is distorted. Relationships are based on sex and need, not love and caring.

Characteristics of Parents of Children Who Molest

1. During infancy, the parents of children who molest are often unable to attend to their children's emotional and physical needs due to their own unmet dependency and sexual needs.

2. The fathers of these children are mainly absent. Many of these fathers have been emotionally absent. Many of these fathers have been emotionally, sexually, and physically abused as children.

3. With the absence of a father figure, there is a preponderance of single-parent mothers. The relationship of mothers and children who molest is highly enmeshed and ambivalent. The children are often the recipients of highly charged negative projections from the mother. The mother's anger at the child's father, of whom the child generally reminds her, may be displaced onto the child.

4. In a study by Friedrich (1990), MMPIs were obtained from 7 mothers in his sample. Anger was a

predominant feature in each of the code types. The mothers also have a propensity toward personality disorders and depression, with minimal evidence of psychotic processes. Many of the mothers suffer from Dependent Personality Disorder, Narcissistic, or Borderline Personality Disorder. A substantial number of parents are also dysthymic.

5. The parents were often themselves victims of sexual abuse and suffered from lack of sexual boundaries in their own childhood homes; therefore, it appears they really do not know what is emotionally and physically intrusive.

6. Parents of molesting children often overstep the boundaries of propriety because they are unclear about what is appropriate, rather than being consciously abusive.

Characteristics of Children Who Molest

1. Sexualized and molesting behaviors in children do not occur without cause.

2. Children who molest are not adequately socialize about emotional and physical boundaries. From observing their parents, by learning from their own treatment, they develop no sense of boundaries; that is to say, they have no sense of when they are intruded upon or when they intrude on someone else.

3. Johnson (1988b, 1989), and Friedrich and Luecke (1988) found that children in their studies had average to low average IQs. Although none of the children were mentally retarded, a large percentage had severe learning problems. Many were found to be in special education classes. Extensive academic and behavioral problems were characteristic of their school performance.

4. Children who molest can be given a DSM-IV diagnosis. By far the most prevalent diagnoses were Conduct Disorder and Oppositional Disorder, although many have Attention Deficit Disorder and are hyperactive.

5. Children who molest have a higher number of sexual behaviors than nonabused children. Sexually aggressive children are aware, at least unconsciously, that they can impact their mother by hurting the child she favors. This aspect in children who molest can lead to incest.

6. Sexually abusive children are heterogeneous and sexually preoccupied. Friedrich and Luecke's study (1988) noted that on Draw-a-Person, Kinetic Family Drawings Test, the Rorschach, the Thematic Apperception Test, and the Robert's Apperception Test there were more references to sexual themes or sexual content than is normally expected. Children who molest more frequently draw genitalia on their human figure drawings than sexually abused children. The preoccupation of these

children with sexuality is evidenced by their drawings. On projective tests, these children see sexual content where others may not.

Traditionally, our culture has denied sexual behaviors in childhood (Ryan & Blum, 1993). Children have been redirected or deterred from open sexual exploration and discouraged from seeking sexual information. Sex education has traditionally taught the process of reproduction with little or no mention of sexual behavior. The interactions explicit in sexual relationships have been learned in secrecy and colored by guilt.

Sgroi (1988, p. 8) summarizes the sexual behaviors of children that may be anticipated at different ages and developmental stages as shown in Table 1.

Based on the literature (Cavanagh-Johnson, 1988; Gil, 1987; Gil & Johnson, 1993; Hindman, 1988, 1991; Ryan & Blum, 1993; Ryan & Lane, 1991) and practical clinical experience with both sexually abused children and juvenile offenders, it is my conclusion that when we observe children engaging in sexual behavior and sexualized interactions with other children, we become aware that sexuality does <u>not suddenly</u> appear in adolescence, but rather develops <u>over time from early in life</u>. We live in a culture that has traditionally <u>denied</u> childhood sexuality, and <u>yet</u> our culture is full of sexual stimuli and messages, in the media, entertainment, music, and

TABLE 1

CHILDREN'S SEXUAL BEHAVIORS

Age Range	Patterns of Activity	Sexual Behaviors
Preschool (0-5 years)	Intense curiosity; taking advantage of opportunities to explore the universe	Masturbation, looking at other's bodies
Primary School (6-10 years)	Game playing with peers and with younger children; creating opportunities to explore the universe	Masturbation; looking at others' bodies; sexual exposure of self to others; sexual fondling of peers or younger children in play or gamelike atmosphere
Preadolescent (10-12 years) Adolescent (13-18 Years)	Individuation; separation from family; distancing from parents; developing relationships with peers; practicing intimacy with peers (same sex and opposite sex; "falling in love")	Masturbation; sexual exposure; voyeurism; open-mouth kissing; sexual fondling, simulated intercourse; sexual penetration behaviors and intercourse

advertising. It is virtually impossible to shelter children in this culture from exposure to sexual learning experiences, and unfortunately much of what children are exposed to is not healthy sexuality but rather messages that suggest sexuality is abusive/self-centered/or a way to compensate when things are not going well.

At the same time, adult discomfort teaches children from an early age that sexual issues are not talked about, so much of what children learn is kept secret. Children learn about sexuality from peers who may be equally uninformed or in experiences of sexual abuse by older abusers or peers as well as from all the sexual stimuli in the environment. We know that children learn how to behave sexually and that they may learn to be sexually abusive as well.

Sgroi (1988, p. 2) says, "Unquestionably, a young child's earliest sexual experience is that of masturbation." Bakwin (1974) notes that infants have been observed to self-stimulate many times a day. Masturbation continues as a common practice from infancy through adulthood. According to Sgroi (1988), by age 2 or 3, most children learn that masturbation in front of others is likely to get them into trouble, consequently children learn to engage in self-stimulation in privacy. During preadolescent and adolescent periods, masturbation

continues as a common type of sexual behavior. Malmquist (1985, p. 137) maintains that "the most common type of sexual behavior in adolescents, after masturbation, is probably heterosexual contact with another adolescent." Alfred Kinsey (Kinsey et al., 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953) and his fellow researchers documented that many boys and girls also have same-sex sexual interactions with peers or older persons. They report that from their population samples approximately one-half of all boys and one-third of all girls had engaged in some type of same-sex sexual activities. Thus, it may be assumed that it is within the norm for adolescents to involve in both heterosexual and same-sex activities.

In approaching the sphere of sexual molestation, however, Sgroi (1988) observes

> that it is very unusual for preadolescents and especially for adolescent boys and girls to meet their social needs with younger children. It would be contrary to developmental norms for adolescents to develop close relationships and practice intimacy with children who are preschool or primary school age. (p. 7)

This conclusion coincides with the orientation instructions regarding the age differential between offender and offendee I received verbally during my predoctoral internship in counseling psychology with Linn County, Oregon, Mental Health Services:

> In the State of Oregon, sexual interaction between children or adolescents who have 3 years, or more,

> age differential is considered to constitute sexual molestation, and it must be reported to law enforcement authorities and Children's Services Division.

There is often a legal age difference criteria for older adolescent offenders. Whereas Oregon, as stated above, considers it to be sexual molestation if the offender is 3 years older than the victim, other locales specify that there must be at least a 5-year age differential between two individuals before it can be classified as sexual abuse (Gil & Johnson, 1993).

Sgroi (1988) views

> depression, withdrawal, aggressive behavior, anxiety, nightmares, school phobias, and many other symptoms as a signal that the child who exhibits them is disturbed or distressed for some reason. One reason might be sexual victimization. We also believe that there are three direct behavioral indicators that a child has been or is being sexually abused. All involve sexual acting-out behaviors by the child and include excessive masturbation, promiscuity, and sexual abuse of another person [italics added]. (p. 11)

Gil and Johnson (1993) report:

> After extensive evaluation of children and their families who were referred as a result of the child's sexual behaviors, definable groups or clusters emerge. If there were a continuum based on the level of sexual disturbance these children could be divided into four groups. (p. 41)

Table 2 shows these four groups.

Toni Cavanagh-Johnson further describes these groups in Tables 3 and 4.

Johnson (1994) lists the following children's sexual behaviors that cause concern:

TABLE 2

A CONTINUUM OF SEXUAL BEHAVIORS

Normal Sexual Exploration	Sexually Reactive	Extensive Mutual Sexual Behaviors	Children Who Molest
Group I	Group II	Group III	Group IV

1. Sexual behaviors that do not have an ongoing mutual play relationship

2. Sexual behaviors that are engaged in by children of different ages or developmental levels

3. Sexual behaviors that are out of balance with other aspects of the child's life and interests

4. Too much knowledge about sexuality and behavior more consistent with adult sexual expression

5. Sexual behaviors that are significantly different than those of other same-age children

6. Sexual behaviors that continue in spite of consistent and clear requests to stop

7. Inability to keep from engaging in sexual activities

8. Sexual behaviors that occur in public or other places where the child has been told they are not acceptable

9. Sexual behaviors that are eliciting complaints from other children and/or adversely affecting other children

TABLE 3

BEHAVIORS RELATED TO SEX AND SEXUALITY IN KINDERGARTEN THROUGH FOURTH-GRADE CHILDREN

Natural and expected	Of concern	Seek professional help
Asks about the genitals, breasts, intercourse, babies.	Shows fear or anxiety about sexual topics.	Endless questions about sex. Sexual knowledge too great for age.
Interested in watching/ peeking at people doing bathroom functions.	Keeps getting caught watching/peeking at others doing bathroom functions.	Refuses to leave people alone in bathroom.
Uses "dirty" words for bathroom functions, genitals, and sex.	Continues to use "dirty" words with adults after parent says "no" and punishes.	Continues use of "dirty" words even after exclusion from school and activities.
Plays doctor, inspecting others' bodies	Frequently plays doctor and gets caught after being told "no".	Forces child to play doctor, to take off clothes.
Boys and girls are interested in having/ birthing a baby.	Boy keeps making believe he is having a baby after month/s.	Displays fear or anger about babies or intercourse.
Show others his/her genitals.	Wants to be nude in public after the parent says "no" and punishes child.	Refuses to put on clothes. Exposes self in public after many scoldings.
Interest in urination and defecation.	Plays with feces. Purposely urinates outside of toilet bowl.	Repeatedly plays with or smears feces. Purposely urinates on furniture.

Table 3--Continued.

Natural and expected	Of concern	Seek professional help
Touches/rubs own genitals when going to sleep, when tense, excited or afraid.	Continues to touch/rub genitals in public after being told "no". Masturbates on furniture or with objects.	Touches/rubs self in public or in private to the exclusion of normal childhood activities. Masturbates on people.
Plays house, may simulate roles of mommy and daddy.	Humping other children with clothes on. Imitates sexual behavior with dolls/stuffed toys.	Humping naked. Intercourse with another child. Forcing sex on other child.
Thinks other sex children are "gross" or have "cooties". Chases them.	Uses "dirty" language when other children really complain.	Uses bad language against other child's family. Hurts other sex children.
Talks about sex with friends. Talks about having a girl/boy friend.	Sex talk gets child in trouble.	Talks about sex and sexual acts a lot. Repeatedly in trouble in regard to sexual behavior.
Wants privacy when in bathroom or changing clothes.	Becomes very upset when observed changing clothes.	Aggressive or tearful in demand for privacy.
Likes to hear and tell "dirty" jokes.	Keeps getting caught telling "dirty" jokes. Makes sexual sounds, e.g. moans.	Still tells "dirty" jokes even after exclusion from school and activities.
Looks at nude pictures.	Continuous fascination with nude pictures.	Wants to masturbate to nude pictures or display them.
Plays games with same-aged childred related to sex and sexuality.	Wants to play games with much younger/older children related to sex and sexuality.	Forces others to play sexual games. Group of children forces child/ren to play.

Table 3--Continued.

Natural and expected	Of concern	Seek professional help
Draws genitals on human figures.	Draws genitals on one figure and not another. Genitals in disproportionate size to body.	Genitals stand out as most prominent feature. Drawings of intercours, group sex.
Explores differences between males and females, boys and girls.	Confused about male/female differences after all questions have been answered.	Plays male or female roles in a sad, angry, or aggressive manner. Hates own/other sex.
Takes advantage of opportunity to look at nude child or adult.	Stares/sneaks to stare at nude person even after having seen many person nude.	Asks people to take off their clothes. Tries to forcibly undress people.
Pretends to be opposite sex.	Wants to be opposite sex.	Hates being own sex. Hates own genitals.
Wants to compare genitals with peer-aged friends.	Wants to compare genitals with much older or much younger children or adults.	Demands to see the genitals, breasts, buttocks of children or adults.
Wants to touch genitals, breasts, buttocks of other same-age child or have child touch him/her.	Continuously wants to touch genitals, breasts, buttocks of other children. Tries to engage in oral, anal, vaginal sex.	Manipulates or forces other child to allow touching of genitals, breasts, buttocks. Forced or mutual oral, anal, or vaginal sex.
Kisses familiar adults and children. Allows kisses by familiar adults and children.	French kissing. Talks in sexualized manner with others. Fearful of hugs and kisses by adults. Gets upset with public displays of affection.	Overly familiar with strangers. Talks/acts in a sexualized manner with unknown adults. Physical contact with adult causes extreme agitation.

Table 3--Continued.

Natural and expected	Of concern	Seek professional help
Looks at the genitals, buttocks, breasts of adults.	Touches/stares at the breats, buttocks of adults. Asks adult to touch him/her on genitals.	Sneakily or forcibly touches genitals, breasts, buttocks of adults. Tries to manipulate adult into touching him/her.
Erections.	Continuous erections.	Painful erections.
Puts something in own genitals/rectum due to curiosity and exploration.	Puts something in own genitals/rectum frequently or when it feels uncomfortable. Puts something in the genitals/rectum of other child.	Any coercion or force in putting something in genitals/rectum of other child. Anal, vaginal intercourse. Causing harm to own/other genitals/rectum.
Interest in breeding behavior of animals.	Touching genitals of animals.	Sexual behaviors with animals.

Note. From "Child Perpetraters: Children Who Molest Children," by Toni Cavanagh-Johnson, 1988, Child Abuse and Neglect: The International Journal, 12(2), pp. 219-229. Reprinted with permission of the author.

TABLE 4

CHILDREN'S SEXUAL BEHAVIORS FROM
NORMAL TO DISTURBED

GROUP	*Group I* *SEX PLAY*	*Group II* *SEXUALLY-REACTIVE*	*Group III* *EXTENSIVE MUTUAL SEXUAL BEHAVIORS*	*Group IV* *CHILDREN WHO MOLEST*
SEXUAL BEHAVIORS	See "Natural and Healthy" Behaviors on Charts	See "Of Concern" and "Natural and Healthy" Behaviors on Charts	See "Of Concern" and "Seek Professional Help" Behaviors on Charts	See "Seek Professional Help" Behaviors on Charts
SCOPE/NO.	Few to many	Several problematic behaviors	Many adult sexual behaviors	Many abusive behaviors
FREQUENCY/ DURATION	Intermittent, At different ages, different frequency	Intermittent to Frequent	Ongoing	Previous, ongoing and increasing May be compulsive need A behavioral pattern
AFFECT Re SEXUALITY	Silly/Giggly/ Light Hearted Perhaps parental or religion induced guilt	Anxiety Shame Guilt Fear Confusion	Needy Confusion Sneaky What's the big deal attitude?	Anxiety Anger Aggressive Rageful Confusion
AGE DIFFERENCE	Similar age	Similar age	1-3 year or living companion	Younger or older 0-12 year difference
COERCION?	Request/ teasing Mutual	Generally no discussion prior to behavior occurring. If discussion, no coercion Non-Coercive	Agreement at conscious or unconscious level Non-Coercive	Threats/ Bribes/Trickery Manipulation Coercion
OTHER BEHAVIORS TO EVALUATE	School Performance Friendships	Family Relations Self Concept Impulse Control	Problems Solving/ Coping Skills Empathy	Relationship to authority figures Peer relations

Table 4--Continued.

GROUP	Group I SEX PLAY	Group II SEXUALLY-REACTIVE	Group III EXTENSIVE MUTUAL SEXUAL BEHAVIORS	Group IV CHILDREN WHO MOLEST
SECRET?	Secret	May be observable	Secret	Secret
RELATIONSHIP TO OTHER	Friends	Accessible children May approach adults	Willing children Sex may become a stable aspect of the relationship	Vulnerable children May be directed at adults
SIBLINGS	Sibling Sex Play (Foster, Natural or Step)	Sibling Sexual Contact (Foster, Natural or Step)	Mutual Sibling Incest (Foster, Natural or Step)	Forced Sibling Incest (Foster, Natural or Step)
PLANNING?	Spontaneous/ Planned	Spontaneous/ Impulsive	Planned	Planned/ Explosive
FAMILY	All types of families	Possibly sexual abuse, other abuse Liberal views	Possible history of poly abuse in family Parents/caretakers emotionally distant Extramarital affairs	May be generations of abuses in families Neglect/abandonment Psychiatric disorders Poor boundaries Sexualized environment Criminal justice problems Parental violence Mostly single parent mothers
AFTER DISCOVERED	Children shy, embarrassed	May be surprised or upset and confused or afraid	Denies or blames other child or does not see any problem with the sexual behavior	Aggressively and angrily blames other child and/or person who caught them or denies
OPERATING LEVEL	Cognitive/ Emotional	Emotional/ Neurophysiologic	Emotional/ Cognitive/ Neurophysiologic	Cognitive/ Emotional/ Neurophysiologic

Table 4--Continued.

GROUP	Group I SEX PLAY	Group II SEXUALLY-REACTIVE	Group III EXTENSIVE MUTUAL SEXUAL BEHAVIORS	Group IV CHILDREN WHO MOLEST
SEXUAL AROUSAL	Arousal/ No Arousal	Arousal/ No Arousal	Arousal/ No Arousal	Arousal/ No Arousal
MOTIVATION	Curiosity/ Exploration Sexual Stimulation	Anxiety reduction/ P.T.S. reaction/ To reduce confusion/ To make sense of sexual misuse or victimization/ Recapitulate previous over stimulation Sexual Stimulation	Coping mechanism to decrease isolation or loneliness or neediness/ Decrease boredom/ Sexual Stimulation	Decrease anxiety, fear, loneliness, anger or other strong unpleasant internal sensations/ Hurt others/ Retaliation/P.T.S. Reaction/Recapitulate Previous Over Stimulation/Compulsive sexual desires Sexual Stimulation
POSSIBLE ETIOLOGICAL FACTORS	Natural and healthy childhood curiosity/ exploration/ experimentation T.V., Videos	Recent or ongoing sexual abuse Emotional abuse Traumatic Sexualization (Finkelhor) Pornography History of sexual abuse in family Overtly sexual lifestyle in home	Sexual and/or emotional and/or physical abuse Abandonment Neglect Extramarital liaisons of parents Inadequate early bonding to caretaker Physiological/ hormonal problems Sexually abused in a group Lack of adult attachments Continuous out of home placements	Intense rivalry for attention between sibs Lack of positive emotional relationships Physiological/ hormonal problems Trauma induced neurobiological changes Pairing of sex/anger aggression/anxiety Neglect/abandonment Inherited vulnerabilities Poly abuse/violence to child/in family history Sexualized relationships/ environment in family Poor boundaries Caretakers with many unmet needs

 4/10/94

Note. From a seminar handout given by Toni Cavanagh-Johnson. Reprinted with permission.

10. Sexual behaviors that are directed at adults who feel uncomfortable receiving them

11. Inability of children 4 years and older to understand their rights or the rights of others in relation to sexual contact

12. Sexual behaviors that progress in frequency, intensity, or intrusiveness over time

13. Exhibition of fear, anxiety, deep shame, or intense guilt associated with the sexual behaviors

14. Engagement in extensive, persistent, mutually agreed upon adult-type sexual behaviors with other children

15. Manual or oral stimulation or genital contact with animal/s

16. Sexualization of nonsexual things, or interactions with others, or relationships

17. Sexual behaviors that cause physical or emotional pain or discomfort to self or others

18. Use of sex to hurt others

19. Verbal and/or physical expressions of anger preceding, following, or accompanying the sexual behavior

20. Distorted logic to justify their sexual actions ("She didn't say 'no.'")

21. Use of coercion, force, bribery, manipulation, or threats associated with sexual behaviors.

Much etiological research has been conducted regarding the incidence of sexual abuse by adult and adolescent sex offenders (Burgess et al., 1987; Groth, 1979; Longo, 1986). Such research data are often used to predict the future offending behavior of children in adolescence who will commit sexual offenses. Despite the great extent of such research, some of the most basic questions about sexual deviancy remain unexplored. According to Erica Goode (1994),

> researchers still have no idea, for example, how widespread pedophilia and other paraphilias are in the general population--indeed, some experts still cite the 1948 Kinsey report as the most recent estimate of the prevalence of such disorders. And although many investigators believe that abnormal patterns of sexual arousal take shape early in life, information about childhood sexuality remains meager, in part because the idea of asking children questions about sex offends American sensibilities. (p. 74)

In this context, Gil and Johnson (1993) cite estimates that adult sex offenders who report a history of childhood sexual abuse range from 10% to 80%. These widespread estimates emphasize the need for more research to provide critically needed answers to many basic questions about child and adolescent sexual offenders.

Studies find that most sex offenders begin engaging in deviant sexual behavior long before they are caught. The average number of victims per offender prior to their reaching age 18 is 7.7 (Abel et al., 1985). For this reason, more programs now target youthful offenders

in the hope that early treatment will prevent later offenses. Some programs even provide therapy for children as young as 6, who are "acting out" sexually with their peers. Therapeutic interventions for such young children is considered by some to be controversial. Critics argue that sexual exploration is a normal part of childhood and consequent labeling of such children as "deviant" may itself have ill effects (Goode, 1994).

Children's Institute International coined the phrase "abuse-reactive children" in 1985. This term is based on the conceptual belief that children who molest other children are reacting to their own early trauma by being abusive, aggressive, and inappropriate sexually (Cunningham & MacFarlane, 1991; Gil & Johnson, 1993). This concept is based on the hypothesis that most children who molest are themselves the victims of sexual abuse. Considerable speculation exists in the clinical literature about the fact that abuse begets abuse, that is, child sexual abuse victims will themselves become victimizers. Johnson (1988b, 1989) believes that conclusions have been drawn either from retrospective data indicating that many adult sex offenders cite early sexual contact with adults or older children, or are drawn from a clinical sample of young sex offenders with a history of sex abuse. Garland and Dougher (1990) maintain that "a reasonable overall estimate of the percentage of adjudicated sex offenders of

children and adolescents who report having experienced sexual contact with an adult during childhood or adolescence is approximately 30%" (p. 499).

Toni Cavanagh-Johnson, a program director for the Support Program for Abuse-Reactive Kids (SPARK), conducted two research studies involving abuse-reactive children. In a sample of 47 boys ages 4 to 13 who were abuse-reactive, 49% had been sexually abused, and 19% were physically abused, for a total of 68% (Johnson, 1988a). The second study (Johnson, 1989) involved 13 female children who molested. One hundred percent of them had a history of being sexually abused. It can be hypothesized that some abused children tend to repeat or reenact the abuse they have experienced. This hypothesis fits with the social learning theory that children develop personality and behavior characters based on their learned experience and role models.

Garland and Dougher (1990) counter the above, believing reliance on the social learning theory alone may be insufficient. They maintain that the so-called "abused/abuser hypothesis" is "simplistic and misleading." Their conclusion is that although some relationship "appears to exist between sexual contact with an adult during childhood and adolescence and adolescents and sexual involvement with a child or adolescent during

adulthood argue strongly for continued research on the issue" (p. 505).

"It's safe to say that children who are sexually abused who then become victimizers are making a powerful statement that their earlier victimization was not resolved" (Friedrich, 1990, p. 244). This lack of resolution may be a factor in the behavioral reenactments of sexually abused children themselves becoming sexual molesters in a chain of events in which the sexually abused produce more sexual abusers. Van der Kolk (1989) maintains that children may be more vulnerable than adults to compulsive behavioral repetition and loss of conscious memory of their trauma. Because drawings, such as the KFD and HFD, are projections of the "inner person"--both on the conscious and unconscious level--it is my hypothesis that such drawings may give evidence of a person being a sexual abuse victim and/or victimizer.

History of Projective Drawings in the Psychological Evaluation of Children

Projective drawings have been used for the psychological study of children for many years. Elizabeth Munsterberg Koppitz (1968), a leading authority on the evaluation and interpretation of children's Human Figure Drawings, wrote in the preface of her book:

> There has never been any doubt in my mind that of all tests and techniques used by psychologists, who work with children, there is one that is more meaningful, more interesting, and more enjoyable than all others,

> and this technique is drawing, just drawing with pencil and paper. I know the value of drawing at first, having used it myself both as a child and as an adult to help me through periods of crises and inner turmoil. Drawing may involve "free drawing" of anything the child wants to depict, or the copying of designs, or the drawing of a specific topic at the request of the examiner, or the making of human figure drawings (HFDs). Even though I have watched hundreds and hundreds of children while they were drawing, I have never become bored and I keep on marveling at the way boys and girls can express themselves and can reveal their attitudes through graphic images. (p. ix)

Children's drawings have been used for the study and evaluation of children for more than a century. In 1885, Ebenezer Cooke of England described developmental stages in children's drawings (Goodenough, 1926). Corrado Ricci, an art historian of Bologna, Italy, conducted the first important study of children's drawings in 1884 (Di Leo, 1970). His assertion that the human figure was the favorite drawing theme of children led others in Europe and the United States to study children's drawings. Pikunas and Carberry (1961) echo Ricci by saying that children most often will draw human beings.

Children's drawings of the human figure attracted considerable attention during the child study movement that blossomed from 1900 to 1915. Children's drawings "add a dimension not tapped by self-report or observation techniques, the dimension of fantasy and imagination" (Klepsch & Logie, 1982, p. xi). In 1913, G. H. Luquet premised that children's drawings are a

representation of what is known rather than what is seen (Di Leo, 1973).

Beginning in the 1930s, there were numerous others who worked with children's drawings for varying purposes; they include:

1. Bender (1937) gathered psychological data about disturbed children.

2. Despert (1938) drew psychological conclusions and interpretations from children's drawings.

3. Anastasi and Foley (1940) looked at abnormal children and children from varied cultures from the perspective of their artistic behaviors.

4. Alschuler and Hattwick (1947) examined the paintings of young children for the purpose of studying their personalities.

5. Raven (1951) introduced a new feature by requesting the child to imagine and describe a series of events while drawing.

6. Hulse (1951) worked with disturbed children by using their family drawings.

7. Reznikoff and Reznikoff (1956) compared children's family drawings.

8. Hammer (1958) made clinical applications from children's projective drawings.

9. Dennis (1966) studied group values based on children's drawings.

10. Koppitz (1968) introduced her comprehensive method for evaluating human figure drawings.

11. Shearn and Russell (1969), by using family drawings, studied the interaction between child and parent.

12. Burns and Kaufman (1970, 1972) introduced the added feature of "action" in family drawings and developed Kinetic Family Drawings as a projective technique for studying and understanding self within the family structure of relationships and dynamics.

Using one of the earliest projective drawing tests, the Draw-A-Person Test (DAP) (Goodenough, 1926; Hulse, 1952), Florence Goodenough attempted to measure intelligence. She noted that in the human figure drawings there was progression with age and intellectual maturity. Her study of HFDs found: (1) they were a valid indication of intelligence and school success; (2) the child's sex made a difference in the characteristics of his or her drawing; and (3) possible pathology can be portrayed in a drawing.

Harris, in 1963, revised Goodenough's DAP and developed separate norms for boys and girls, thus standardizing a version now known as the Goodenough-Harris Drawing test (Hackbarth, 1988).

J. N. Buck became one of the first to use the human figure drawing as a projective test by introducing, in 1948, the House-Tree-Person (HTP). This became another projective instrument to aid in the psychological assessment of adults and adolescents by providing clinical interpretations of HTP drawings (Burns & Kaufman, 1970).

Karen Machover, in 1949, provided foundation for the qualitative assessment of human figure drawings by discussing indicators of emotional problems (Klepsch & Logie, 1982). Machover (1949) hypothesized that an individual's HFD can reveal his or her characteristic impulses, anxieties, conflicts, and compensations.

Hulse (1951) became the first to use the Draw A Family as a projective test to disclose family conflicts and feelings (Hackbarth, 1988). Koppitz (1968) revised Machover's work by devising a comprehensive method of psychological evaluation using HFDs.

The Kinetic Family Drawing (KFD), developed by R. C. Burns and S. F. Kaufman (1970), evolved from projective drawings that were used to evaluate and diagnose individuals with learning, emotional, or behavioral disorders. Their analysis of KFDs not only focused on the figures in the drawings, but also on action and movement.

Knowledge of children's drawings is growing and cumulative. Joseph Di Leo (1970) concluded that over time children's drawings have been consistent and similar from one generation to another, despite differences in culture, ethnicity, and socioeconomic groupings. For example, he noted that children, even though they are widely separated by space, time, and culture, continuously use the same symbolic stylized version of the sun as though they had all agreed to do it that way.

Children draw what is important to them, with people being their favorite subject. Because their drawings are a projection of themselves, they reveal their "inner realism" as opposed to "visual realism" (Di Leo, 1973). It is believed that the HFD is an expression of self or body image. Children are prone to draw a figure that is their same sex when asked to draw a person (Klepsch & Logie, 1982).

Rodgers (1992) believes "drawings can be an important tool in assessment, revealing concerns prominent in the child's perception of his sexual role and acceptability of self alone and in the family" (p. 208).

Children's drawings: (1) are less susceptible to inner defenses than speech (Di Leo, 1970); (2) give expression of their inner world through the actions in their drawings, thus recommending them for use in

understanding children (Burns & Kaufman, 1970); (3) are easy to obtain, uncovering otherwise inaccessible information about the child, which is especially helpful with children who are shy or have difficulties with language (Klepsch & Logie, 1982); (4) can often open up children who are unable to express anxiety and conflict (Koppitz, 1968); (5) are an unconscious projection of their emotional aspect of personality (Di Leo, 1983); and (6) unwittingly reflect problems of the emotionally disturbed (Koppitz, 1968).

Because projective drawings enable an emotionally disturbed child to unwittingly reveal potential problems, the drawings may be useful in identifying potential juvenile sexual molesters. Di Leo (1973) wrote: "Drawings by well-adjusted children are strikingly similar. Those by the emotionally disturbed are strikingly different from those and from each other as each child is disturbed in his own special way" (p. 21).

Several researchers, including Koppitz, Di Leo, Klepsch, Logie, Burns, and Kaufman, have studied children's drawings to determine the indicators of emotional disturbance.

Koppitz (1968) developed norms and objective scoring for analyzing human figure drawings. These were used in comparing the drawings of emotionally disturbed children in child guidance clinics with those of children

rated by teachers as outstanding students having good social, emotional, and academic achievement. Koppitz found more than 30 Emotional Indicators occurring more frequently in the drawings from emotionally disturbed children. Poor integration, shading of body or limbs, slanting figures, and tiny figures are significant indicators in these drawings at the $p < .01$ level. At the $p < .05$ level, big figures, short arms, cut-off hands, and the omission of a neck are significant.

Di Leo (1973), based on his collection of thousands of children's drawings, believed the following are indicators of serious emotional disturbance: (1) scatter of body parts; (2) absence of persons; (3) significant incongruities; (4) defacement of a drawn human figure; and (5) rigid, robot-like figures.

Koppitz (1968) found children who drew tiny figures to be shy and depressed. Di Leo (1973) believed children who drew tiny figures revealed their feelings of inadequacy, especially when they drew on the lower half of the page, incorporated tiny unstable feet, or drew an exaggerated, domineering parent figure.

Other indicators of emotional disturbance, such as anxiety and neurotic conflict, according to Di Leo (1973), are: (1) excessive shading, (2) explicit genitalia, (3) concealment of genitals, (4) sex role confusion, (5) emphasis or omission of arms and hands, and (6) darkened

clouds and darkened sun. Di Leo found that since the presence of genitalia in the drawings of preadolescent children (ages 6-12 years) is unusual, their presence in drawings is apt to be highly significant.

Aggression is indicated by large arms, hands, and teeth; arms show power; and feet indicate security. Timidity and nonreaction are indicated by the omission of upper extremities; whereas unusual-sized figures, along with overemphasis of body parts, facial expressions, and omission of parts, indicate emotional disturbance (Di Leo, 1973; Klepsch & Logie, 1982).

Human Figure Drawings

HFDs, according to Koppitz (1968), have become one of the most widely used techniques of psychologists in working with children. She asserts that, from the time of Cooke in 1885 to the present, emphasis in the study of children's drawings

> has shifted from comparative investigations of graphic productions by children and primitive people to clinical analyses of paintings and drawings of disturbed children, to longitudinal studies of individual youngsters from their first scribbles to mature drawings, and to the assessment of mental maturity by means of human figure drawings. (p. 1)

In preparing a child to draw an HFD, simple, nonspecific instructions are given:

> On this piece of paper, I would like you to draw a WHOLE person. It can be any kind of a person you want to draw, just make sure that it is a whole

> person and not a stick figure or a cartoon figure. (p. 6)

The result is a graphic form of communication between the child and the clinician that differs from the spontaneous drawings children may draw when alone or with others. According to Koppitz (1968), the HFD enables the one drawing to look inward and project outwardly the essence of his or her own attitudes, thoughts, concerns, and feelings. A drawing becomes a language that can be analyzed in terms of: (1) structure, that is, the normally expected details on drawings at different age levels; (2) quality, that is, unusual details, omissions, or additions; and (3) content and meaning of children's graphic productions.

> All statements, including HFDs, have some meaning and serve some purpose for the child who makes them. A drawing may represent many different things. It may be an expression of joy or anger, or a cry of fear or anguish; it may be a question, or it may be a demand; it may reflect a wish or a fantasy; or it may be a retelling of something the child has seen or experienced. An HFD can be the expression of any of these and much more. <u>It is the task of the clinician to discover the meaning of HFDs and to find out what the child is trying to communicate through his drawings</u> [italics added]. (Koppitz, 1968, p. 74)

Studies by several researchers (Buck, 1948; Hammer, 1958; Jolles, 1952; Kinget, 1952; Koppitz, 1968; Machover, 1949) have found numerous elements in HFDs that are indicative of various aspects of the drawer's sexuality, such as: (1) characteristics, (2) concerns, (3)

experience, (4) disturbance, (5) development, (6) abuse, (7) acting out, and (8) voyeuristic and/or exhibitionistic tendencies.

Elements From Significant Researchers

Rodgers (1992) lists significant elements in HFDs from the following researchers: Buck, 1948; Machover, 1949; Jolles, 1952; Kingst, 1952; Hammer, 1958; and Koppitz, 1968.

Buck, 1948

Buck's significant elements are:

1. Elongated feet (2 times as long as wide) are associated with strong security needs and possible castration fears.

2. Emphasis on hair, either on head, chest, beard, or elsewhere, suggests virility strivings, sexual preoccupation, and/or possible narcissism, perhaps with inclination toward sexual delinquency.

3. Nose emphasis through pressure or size suggests sexual difficulties and/or castration fears.

4. Omission of hands appears to be associated with masturbatory guilt.

5. Shaded hands suggest anxiety and guilt feelings, usually associated with aggressive or masturbatory activity.

6. Hands covering the genital region suggest

autoerotic practices. (This was noted particularly in drawings by sexually maladjusted females.)

7. An unusually large head indicates dissatisfaction with one's physique.

8. Tie emphasis is associated with feelings of sexual inadequacy.

9. Omitting the mouth demonstrates a reluctance to communicate with others.

Machover, 1949

The following, according to Machover, are indicative of sexual experience, concern, or development:

1. Omission of body parts

2. Refusal to draw legs or figure below the waist

3. Unusually large breasts drawn by males probably indicating strong oral or dependency needs

4. Hidden hands

5. Emphasis on hair suggesting virility strivings, sexual preoccupation, possible narcissism, or inclination toward sexual delinquency

6. Dim facial features suggesting timidity or self-consciousness in interpersonal relations

7. Unusually large eyes, or large orbit with tiny eye, possibly indicating voyeuristic tendencies

8. Eyelashes detailed by males suggesting possible homosexual tendencies

9. Unusually small head indicating feelings of

inadequacy or impotency--intellectually, socially, or sexually

10. Nose emphasis suggesting possible masturbatory guilt or feelings of sexual inadequacy or impotency

11. Objects in the mouth suggesting oral erotic needs

12. Underclothed or nudity suggesting a sexually maladjusted personality

13. Overclothed suggesting a sexually maladjusted personality

14. A cupid bow mouth in female figures suggesting sexually precocious adolescent females

15. A reluctance to close the bottom or trunk suggesting sexual preoccupation

16. Erasure, reinforcement, or uncertainties in drawing shoulders suggesting drive for body development

17. Massive shoulders, in males, suggesting aggressive tendencies or sexual ambivalence, often with a compensatory reaction, as in insecure individuals and adolescents

18. Omission of arms suggesting guilt feelings, dissatisfaction with environment, and strong withdrawal tendencies

19. Vague or dim hands suggesting lack of confidence or productivity

20. Shaded hands suggesting anxiety and guilt

feelings, usually associated with aggressive or masturbatory activity

21. Hands covering the genital region suggesting autoerotic practices (noted especially in drawings by sexually maladjusted females)

22. Fingers shaded or reinforced indicating guilt feelings (usually associated with stealing or masturbation)

23. Emphasis on pockets indicating infantile, dependent, male personality, affectional, or maternal deprivation, which often contributes to psychopathic proclivities; emphasis on large pockets suggesting adolescent virility strivings with conflict involving emotional dependence on mother

24. Tie emphasis indicating sexual inadequacy; tiny, uncertainly drawn, or debilitated ties suggesting a despairing awareness of weak sexuality; long and conspicuous ties suggesting sexual aggressiveness, perhaps overcompensating for fear of impotence

25. Overdetailing of shoes, laces, and so forth, demonstrating obsessive and distinctly feminine characteristics, as in pubescent females.

Jolles, 1952

Jolles' contributions include:

1. Refusal to draw legs or a figure below the waist, or use of only a very few sketchy lines, suggests

acute sexual disturbance or pathological constriction.

2. Elongated feet are associated with strong security needs and possible castration fears.

3. Nose emphasis through pressure or size suggests sexual difficulties and/or castration fears.

4. Shaded hands indicate anxiety and guilt feelings, usually associated with aggressive or masturbatory activity.

5. Emphasis of a tie suggests feelings of sexual inadequacy.

Kinget, 1952

According to Kinget:

1. Absence of sexual characteristics where their appearance is relevant indicates deficient or repressed sexual concern.

2. Maladjusted subjects tend to cut off or leave out certain body parts.

3. Lack of curves suggests limited capacity for establishing smooth and pleasant relationships.

4. Accentuation of secondary sexual characteristics evidences sexual concern.

5. Mustaches, beards, and sometimes ties and pipes in drawings of males indicates sexual concern.

6. Uniforms may reveal a need for domination and/or ambition.

7. Emphasis on secondary female characteristics

are directly representative of the subject's concern and awareness of her physical appearance or attractiveness.

Hammer, 1958

Hammer maintains:

1. Massive shoulders in the drawings of males suggest aggressive tendencies or sexual ambivalence.

2. Omission or distortion of any part of the figure drawn suggests conflicts that may be related to the part omitted, or suggests sexual experience, abuse, or acting out.

3. "Sexual curiosity and awakening of sexual impulses in children frequently result in sexual explorations and sex play with other youngsters. Such activities may be accompanied by intense feelings of guilt" (Hammer, 1958, p. 118).

Koppitz, 1968

Koppitz says inclusion or omission of certain items drawn in the HFD are the result of these feelings such as:

1. Omission of hands, arms, legs
2. Transparencies
3. Heavily reinforced lines on crotch
4. Inclusion of secondary sex characteristics, such as whiskers
5. Suggestive elements, such as slit skirt

6. Phallic symbols

7. Shading from waist down

8. Rigidly clinging arms

9. Legs tightly pressed together

10. Legs displaced

11. Underclothed or overclothed

12. Covering of genitals

13. Pants full of holes on boy suggesting castration fears

14. Omission of nose possibly due to masturbation guilt

15. Exaggeration or omission of body parts possibly indicating masturbation guilt.

Developmental Items

Koppitz (1968) analyzed HFDs according to several different dimensions, scoring them for two different types of objective signs.

Developmental Items (Koppitz, 1968) are defined as those occurring:

> only on relatively few HFDs of a younger age level and then increases in frequency of occurrence as the age of the children increases, until it gets to be a regular feature of many or most HFDs at a given age level. (pp. 9-10)

Koppitz (1968) utilized 30 signs on HFDs to meet criteria set up for Developmental Items. They are, in ascending order of development:

1. Head
2. Eyes
3. Pupils
4. Eyebrows or eyelashes
5. Nose
6. Nostrils
7. Mouth
8. Two lips
9. Ear
10. Hair or head covered by hat
11. Neck
12. Body
13. Arms
14. Arms two-dimensional
15. Arms attached at shoulders
16. Arms pointing downward
17. Elbow
18. Hands
19. Fingers
20. Correct number of fingers
21. Legs
22. Legs two-dimensional
23. Knee
24. Feet
25. Feet two-dimensional
26. Profile
27. Good proportion
28. Clothing: one piece or none
29. Clothing: two or three pieces
30. Clothing: four or more pieces. (pp. 9-10)

Emotional Indicators

Emotional Indicators (Koppitz, 1968) are defined as a sign on HFDs that can meet the following three criteria:

1. It must have clinical validity, that is, it must be able to differentiate between HFDs of children with and without emotional problems.

2. It must be unusual and occur infrequently on the HFDs of normal children who are not psychiatric

patients, namely, the sign must be present on less than 16% of the HFDs of children at a given age level.

3. It must not be related to age and maturation, that is, its frequency of occurrence on HFDs must not increase solely on the basis of the children's increase in age.

Koppitz (1968) lists 38 HFD signs believed to possess all the characteristics of Emotional Indicators, which are derived from Machover and Hammer and Koppitz's own clinical experience. They are:

I. Quality Signs
broken or sketchy lines
poor integration of parts of the figure
shading of the face or part of it
shading of the body and/or limbs
shading of the hands and/or neck
gross asymmetry of limbs
figure slanting by 15 degrees or more
tiny figure, 2" or less in height
big figure, 9" or more in height
transparencies

II. Special Features
tiny head, 1/10th of total height of figure
large head, as large or larger than body
vacant eyes, circles without pupils
side glances of both eyes, both eyes turned to one side
crossed eyes, both eyes turned inward
teeth
short arms, not long enough to reach waistline
long arms, that could reach below kneeline
arms clinging to side of body
big hands, as big as face
hands cut off, arms without hands and fingers
hands hidden behind back or in pockets
legs pressed together
genitals
monster or grotesque figure
three or more figures spontaneously drawn
figure cut off by edge of paper
baseline, grass, figure on edge of paper

sun or moon
clouds, rain, snow

III. Omissions
omission of eyes
omission of nose (Boys 6, Girls 5)
omission of mouth
omission of body
omission of arms (Boys 6, Girls 5)
omission of legs
omission of feet (Boys 9, Girls 7)
omission of neck (Boys 10, Girls 9) (pp. 35-36)

HFDs have been used to compare sexually abused children with a non-molested population (Howe, Burgess, & McCormack, 1987; Rutkin, 1988; Sidun, 1986; Sidun & Rosenthal, 1987; Verdon, 1987). These researchers helped identify characteristics that might be expected in HFDs of abused children.

Reliability of the Human Figure Drawing

Elizabeth Koppitz (1968) is a recognized authority on the projective use of the Human Figure Drawing and has been cited by numerous researchers who have studied HFDs. Among them are several whose work was researched for this dissertation (Cho, 1987; Chuah, 1992; Gardano, 1988; Hackbarth, 1988; Rodgers, 1992; Shaw, 1989). Koppitz carried out a normative study to determine the frequency of occurrence of the 30 Developmental Items on HFDs of boys and girls at each age level from 5 through 12 years. Her normative study was based on 1,856 public school students representing 86 entire classes, kindergarten through sixth grade, in 10 different elementary schools.

The same 1,856 children were also used for the normative study of the 30 Emotional Indicators on HFDs.

Working with Dr. Mary Wilson, a fellow psychologist, Koppitz determined the reliability of scoring HFDs for both Developmental Items and Emotional Indicators. Koppitz reports:

> The other psychologist and the writer scored independently of each other the HFDs of 10 randomly selected second-grade pupils and of 15 children referred to the school psychologist because of learning and behavior problems. The 25 protocols were checked for the presence of the 30 Developmental Items and the 30 Emotional Indicators. The two examiners checked a total of 467 different items for all drawings. Of these, 444 or 95 percent of the items scored were checked by both psychologists, whereas 23 items or 5 percent were scored by only one or the other of the investigators. The average number of items scored for each drawing was 19. On ten of the HFDs, there was a perfect agreement as to the scoring, while on 15 of the HFDs, the two examiners differed by one or two points only. (1968, p. 10)

Validity of the Human Figure Drawing

Koppitz (1968) conducted a series of studies to determine the validity of 30 Developmental Items and 38 Emotional Indicators on HFDs.

Using the 1,856 subjects in the HFD normative studies cited above, validity of the 30 Developmental Items was established by their meeting these criteria: (1) on HFDs, Developmental Items relate primarily to age and maturation and increase in frequency of occurrence as the child gets older; (2) HFDs are not markedly affected

by the instructions given to the child nor by the drawing medium used; (3) HFDs are not greatly influenced by school learning, nor (4) by the child's artistic ability.

To establish validation of Emotional Indicators on HFDs, Koppitz tested two hypotheses: (1) Emotional Indicators occur more often on the HFDs of children with emotional problems than on the drawings of well-adjusted children; (2) the HFDs of emotionally disturbed children will show a greater number of Emotional Indicators than HFDs of well-adjusted children. This study was conducted on the HFDs of 76 pairs of public school children matched for age and sex. Each group consisted of 32 boys and 44 girls. Group A was made up of 76 patients of a child guidance clinic, while Group B was composed of students from the same elementary school. The children were of normal intelligence or above.

The HFD test was administered individually to each subject in the two groups. In this study, 12 of the Emotional Indicators were found significantly more often on the HFDs of the clinic patients than on the drawings of the well-adjusted pupils, and 16 of the items were present exclusively on the HFDs of the clinic group. Koppitz concluded that "the findings in this study offer support for the two hypotheses tested. Thirty of the 32 items investigated were shown to be clinically valid Emotional Indicators" (1968, p. 42).

Kinetic Family Drawings

In order to understand a child, Di Leo (1973) thought that the child should not be viewed in isolation from the family, because the family affects a child's self-image and is a place to search for the causes of behavioral disorders. Family drawings are an aid to understanding children in the context of their social environment. Koppitz (1968) found that whereas children often will not verbally express negative emotion towards parents in an interview, they are able to express such feelings through art.

Although Appel (1931) used family drawings to gain insight as to how children perceive their families, Hulse (1951, 1952) is usually credited for devising this technique, calling it the "Family Drawing Test" (FDT). Hulse postulated that by drawing the family, rather than just a person, useful information about how a child perceives and interacts with his or her family becomes evident. He rejected objective scoring in favor of a "Gestalt" approach, which asked a child to merely draw his or her family in a static mode.

The FDT is one important technique that developed out of the era of growth of projective methods during the middle of the 20th century. Di Leo (1973) maintained: (1) the family drawing is more affective than cognitive; (2) the drawings of human figures in a family group are

inferior products to the Draw-A-Person (DAP); and (3) the DAP is associated with intellectual maturity, but the same is not true of human figures in a family group.

Burns and Kaufman (1970) allowed the child to go beyond a static representation of family by adding the kinetic feature, which requests the child to draw each person in the family "doing something." They believed adding action to a family drawing provides more information and produces a more dynamic understanding of the family, including the development of self within the various matrices of the family. Because the KFD is a projective instrument, it shows primary disturbances more quickly and adequately than would interviews or other probing techniques (Burns & Kaufman, 1972).

Mayer (1983) maintained that the KFDs are even more revealing than static drawings for the purposes of assessment, eliciting affect, and encouraging dialogue. Burns and Kaufman (1972) demonstrated the effectiveness of KFDs by utilizing 10,000 drawings in their clinical experience and found "a freshness and naivete which is quickly lost as conformity, defensiveness, and sophistication take over" (p. 1). They believe that the kinetic factor in family drawings yields more information about the child's perception of self in relation to an active, ongoing process of family relations. The distinction between the active and static representations

of the family, along with the greater range of possibilities for the use of family drawings, led Burns and Kaufman to develop the KFD technique. The kinetic factor in the drawing of the family allows the child to integrate and involve the family members with each other, if he or she chooses to do so (O'Brien & Patton, 1974).

The KFD is used by clinicians and school psychologists because of its importance to family dynamics in the etiology and treatment of emotional disorders of children (Reynolds, 1978). Burns and Kaufman (1972) cited Louise Bates Ames, head psychologist at the Gesell Institute of Child Development, as saying:

> Seldom has a test shown itself to be able to tell us so much about a subject so quickly and so surely . . . [telling] us so very much about what children are like, what their problems are, what life looks like to them. (pp. v, viii)

Burns (1982) later cited Ames as saying, "The theory behind the KFD test has been throughout that the child's response, as seen in this test, can show often much better than his own words how he feels about himself as a member of his family" (p. vi).

Although the use of KFDs has yielded positive results in terms of using drawings to understand children, research on the KFD is in the beginning stages, and the need for further research is strongly indicated (Falk, 1981; Rodgers, 1992).

Significant Examples of KFD Research

Beginning in the 1970s, throughout the 1980s, and now into the 1990s, the KFD continues to be used in research and as an assessment tool by clinicians who work with children. The following are significant examples of the research and use of KFDs:

1. Protinsky (1978) found the KFD was an "initial alert" to a child that may be undergoing emotional turmoil and, for this reason, recommended that elementary school counselors use this technique to understand the affective state of students.

2. Knoff and Prout (1985b), in their survey of school psychologists, found that 62% of their respondents reported that they always, or frequently, use the KFD as one of their social-emotional assessment instruments.

3. Barkdull (1989) asserted that from KFDs hypotheses can be generated and therapeutic interventions can be designed to help the family.

4. Cargo (1989) studied the KFDs of children from divorced and intact families. She found that in the drawings of early-latency-age children, fathers were more often omitted, especially in KFDs drawn by boys. Descriptions of parental attributes were more extreme and there was a stronger preference for the involvement of both parents in activities in the drawings by children in divorced homes.

5. Schornstein and Derr (1978) believed the KFD is valuable in the assessment of abused children. From the KFDs drawn by abusive parents, they believed it could be determined: (1) how the parents regarded the abused child, (2) who perpetrated the abuse, and (3) whether situational pressures were causal in the abuse. Violence is indicated in children's KFDs by the omission of family members or body parts (Wohl & Kaufman, 1985).

6. Sexual implications have been found in KFDs in sexual characteristics, symbols, themes, and actions.

Di Leo (1973) found sexual precociousness in the drawings of the "knowing child."

Johnston (1975) utilized KFDs in studying sexually abused children and found disturbance in roles and relationships within the families.

Sahd (1980) and Goodwin (1982) cited the use of KFDs in the assessment of incest victims.

Naitove (1982) advocated the use of the KFD to assess the strength of family ties, along with the child's relationship to parents, other family members, and to the sexual abuser.

Naitove (1982) and Mayer (1983) cited examples in which children first revealed their sexual molestation through their KFD drawings.

Jordon (1985) studied the KFDs of 11- to 16-year-old females and found trained clinicians could

differentiate girls from sexually-abusing families and those from normal families. In her study, 3 items out of 43 were statistically significant: (1) Barriers between the Self and Mother, (2) Mother Activity, and (3) Father Activity.

German (1986) studied female adolescent incest victims and noted that in 50% of their KFDs sexual symbols or "rare" sexualized themes were present. Among her significant findings in the KFD drawings of female adolescent incest victims were: (1) parents not interacting with each other, (2) separate individual activities, (3) barriers between figures, (4) isolation of the self, (5) anxiety factors, (6) mother-daughter problems, (7) similar treatment of figures, (8) omission of feet and other body parts, (9) aggressive factors on the part of father, and (10) sexual themes.

Stawar and Stawar (1987) compared the KFDs of a clinical population of Caucasian boys treated in a community mental health center with KFDs drawn from a similar normal population. Significant differences between the two groups of KFDs included closeness to others, style, and self-actions.

Hackbarth (1988) compared the KFDs of three groups: (1) sexually abused children, (2) children not identified as sexually abused, and (3) mothers of these children. Significant differences were that the mothers

of sexually abused children omitted more figure characteristics or omitted more figures from their drawings than did the mothers of nonsexually abused children. The nonsexually abused children had a significant difference from those who were sexually abused: Their drawings received higher scores on the like-to-live-in-family (LILIF) on the basis of five counselor ratings.

Sexual symbols were found by Mottinen (1988) to be significantly present in 20% of KFDs drawn by Caucasian children attending parochial schools.

Shaw (1989) also found sexual symbols such as heavily shaded beds and belts, ironing boards with legs forming an "X," lamps, male penis areas emphasized or shaded, and figures blackened from the waist down significantly present in 14% of the KFDs drawn by non-clinical Black children.

Rodgers (1992) concluded that the sexual symbols, themes, and actions that appeared in HFD and KFD drawings of children were an indication of past or present sexual experiences. She found that children who had been subjected to unusual sexual experiences, either as perpetrator or victim, presented drawings that were very sexual or asexual. Their drawings included either much sexual detail or they drew only very basic drawings that omitted all detail.

Significant Findings in the Evolution of KFD Research

The following illustrate significant findings in the evolution of research of KFDs:

1. A child who is happy in his or her family group draws members more or less in order of age and correct size in relation to each other. The omission of parents or siblings is highly significant and reflects strong negative feelings. Omission of self is unusual, significant, and symbolizes feelings of rejection or not belonging to the family (Di Leo, 1973; Koppitz, 1968).

2. Sex, age, and developmental variables may be present in KFDs. Rodgers (1992) maintained that it is important for those interpreting KFDs to be aware of, and knowledgeable about, these factors especially when diagnosing possible pathology in those who draw. She cited the following researchers to support this: (1) Jacobson (1973) compared normative data on middle class children between the ages of 6 and 9 years old and found males in this age bracket were more likely to omit body parts than were similar-age girls, thus supporting HFD studies that females are superior in drawing ability than their cohort-age males; (2) Brewer (1980) found 6- to 8-year-old children drew themselves interacting with others; whereas 9- to 12-year-olds did not; (3) Thompson (1975) found a predominance of adolescents drawing all their

family members in isolated actions, thus indicating the "isolation" factor should not be considered pathological; (4) evidence to support developmental differences in KFDs was also found by Acosta (1989); and (5) Conant (1988) was able to differentiate between males and females, younger and older children, and clinic and non-clinic populations.

3. The relative position of figures in family drawings indicates how close or distant the relationships are; whereas the relative size of the figures shows the importance of individual family members. Similarity of clothing and figures is indicative of positive rapport between persons. Lack of communication or isolation between family members is suggested by placing them in separate compartments (Di Leo, 1973). In comparing the KFD styles of emotionally disturbed children with those of well-adjusted children, McPhee and Wegner (1976) found folding, compartmentalization, and edging were most reliably detected.

4. Di Leo (1983) found: (1) Nurturing is indicated by the mother-figure cooking or caring for people, plants, or animals; (2) order and compulsiveness are indicated by cleaning and working; (3) persons drawn doing separate activities suggest withdrawal or lack of interplay between family members; (4) rivalry is shown by forceful action among family members; (5) hostility is

depicted by weapons; and (6) good family relationships are indicated by positive interaction between members.

Reliability of the Kinetic Family Drawing

Johnson and Gloye (1958) stated that the need exists for the study of projective drawing variables that can be measured in quantitative or precisely defined qualitative terms. Projective testing variables need to be systematically evaluated to establish norms, to increase the reliability of scores, to firmly establish validity, and to further the psychometric sophistication of projective measures.

The popularity of projective drawings waned during recent years while psychologists debated their testing validity and usefulness (Bellak, 1950; Carp, 1950; Di Leo, 1983; Hammer, 1958, 1969; Jones & Thomas, 1961; Knoff, 1983; Lewandowski & Saccuzzo, 1976; Martin, 1983; Peterson & Basche, 1983; Swenson, 1968; Vukovich, 1983). This debate became more evident when school psychologists began using projective techniques during the 1960s and 1970s as readily as clinicians. During this time, approaches to the administration and evaluation of these devices were introduced, making projective testing more accessible (Koppitz, 1983).

KFDs have been criticized for a lack of

scientifically accountable normative data and for low reliability and validity. Since the introduction of the KFD in 1970 and 1972, many researchers have attempted to establish both validity and reliability for this projective technique (Cho, 1987; McGregor, 1978; McPhee & Wegner, 1976). Many of these studies have been conducted in connection with doctoral dissertations. The KFD has been criticized for lacking empirical data to substantiate its reliability (Gersten, 1978; Harris, 1978; McPhee & Wegner, 1976). Conoley and Kramer (1989) cite Cundick for indicating that KFDs have been criticized for a lack of scientifically accountable normative data and for a low reliability and validity.

KFD reliability has been related to the development of objective scoring systems. Through the years studies have had varying degrees of success in establishing KFD reliability. Those having some measure of success were: Johnston (1975), Cummings (1980), Mostkoff and Lazarus (1983), and Layton (1984). Those not so successful were: Levenberg (1975) and McPhee and Wegner (1976).

Levenberg (1975) sought to demonstrate the accuracy of clinical judgment with KFDs. Using drawings by 18 normal and 18 disturbed children, he asked secretaries, predoctoral psychology interns, and postdoctoral-level clinicians to differentiate between the

two groups by rating each drawing as either "normal" or "disturbed." Whereas postdoctoral clinicians achieved 72% accuracy, secretaries and predoctoral interns achieved only 61% accuracy in rating the drawings. Burns was also asked to rate the same drawings, achieving only 47% accuracy.

Johnston (1975) was more successful in establishing reliability with KFDs. A well-adjusted group of 20 children drew a set of KFDs; 2 weeks later they drew another set. This study produced a correlation of .71 in comparing features of the two KFD sets.

McPhee and Wegner (1976) asked five judges to rate the KFDs of 102 emotionally disturbed and 102 well-adjusted children taken from grades 1 to 6. Using KFD styles as identified by Burns, these judges achieved an inter-rater median reliability correlation of .87; overall correlations ranged from .655 to 1.000. This study was successful in establishing KFD reliability.

Meyers (1978) achieved an interscorer reliability of .94 (range was .81 to 1.00), which was developed from 21 KFD scoring variables.

Using the KFD scoring methods as developed by others before him (McPhee & Wegner, 1976; Meyers, 1978; O'Brien & Patton, 1974), Cummings (1980) sought to determine the reliability of KFD scoring methods in comparing similar sets of drawings to see if they would

produce similar results. KFDs by 111 learning disabled, behavior disordered, and mainstreamed children were produced 5 weeks apart. Two male and two female judges trained in the KFD scoring methods were asked to rate the two sets of KFDs. These judges produced high interscorer reliabilities for about half the variables. Cummings concluded that those variables not yielding good test-retest stability were possibly assessing transitory states as opposed to trait qualities.

Mostkoff and Lazarus (1983) verified Cummings's conclusion about state versus trait qualities. They developed their own objective scoring system to assess inter-rater and test-retest reliabilities of the KFD. Mostkoff and Lazarus found inter-rater reliabilities ranging from .86 to 1.00, with a mean of .97. Nine of their 20 scoring variables had significant test-retest stability.

Because of various studies such as those cited above, the pioneers of KFD scoring methodology, Burns and Kaufman, felt the need to reassess and update their own scoring methods (Burns, 1982). Burns reorganized and attempted to simplify the scoring criteria by dividing them into four parts (Gardano, 1988): (1) Actions; (2) Distance, Barriers, and Positions; (3) Figure Characteristics (body parts); and (4) Styles (organization of the picture).

Layton (1984) used two examiners to compare 119 drawings from well-adjusted children and 99 drawings from children experiencing problems. Using 142 signs indicating family or emotional problems and 14 signs indicating healthy functioning, two examiners were asked to rate the drawings. Significant rater agreement was found for 133 of the 156 signs, with a reliability level of .05.

KFD studies used an average of two judges to determine inter-rater reliability. The Meyers study (1978) developed high inter-rater reliability ranging from .81 to 1.00. McPhee and Wegner (1976) had inter-rater reliability ranging from .655 to 1.000. Cummings (1980), using the three methods of Meyers, O'Brien, and Patton, and McPhee and Wegner, produced high inter-rater reliabilities when using five judges. Cummings found that 6 of the 49 variables differentiated groups of children who had behavioral problems, a learning disability, or were normal.

Gardano's study (1988) used a KFD revised scoring method (KFDSM) to evaluate the family structure of children from alcoholic families. Her study suggested that 8 of the 20 KFDSMs had high inter-rater reliability, with the following variables proving valid in differentiating the two test groups: (1) in terms of

hierarchies--size of the mother figure and variation between the sizes of the family figures, and (2) in terms of boundaries--distance between family figures, especially parental figures.

Validity of the Kinetic Family Drawing

Many arguments revolving around the validity and usefulness of projective tests appear in regard to projective drawings (Blatt, 1975; Dalby & Vale, 1977; Fuller, Preuss, & Hawkins, 1970; Levenberg, 1975; Lingren, 1971; Robach, 1968; Swenson, 1968). Differing and varying degrees of success have resulted from researchers endeavoring to demonstrate KFD validity (Brannigan, Schofield, & Holtz, 1982, cited by Shaw, 1989; Britain, 1970; Jacobson, 1973; Layton, 1984; Levenberg, 1975; McCallister, 1983; McKnight-Taylor, 1974; Raskin & Bloom, 1979; Sayed & Leaverton, 1974; Younger, 1982).

Whereas McPhee and Wegner's (1976) research was less successful in validating KFDs, others demonstrated strong validity. Included among the latter are: (1) Sims (1979) correlated KFDs with the Family Relations Indicator (Howells & Lickorish, 1976a); (2) Cho (1987) correlated KFDs with the Semantic Differential Family Rating Scale; (3) Shaw (1989) found the KFD to be a "valid and useful instrument in gaining information about how Black children in the Midwest perceive themselves and their family

relationships" (p. 174); and (4) German (1986) found validity when using the KFD with the High School Personality Questionnaire and the Piers-Harris Children's Self-Concept Scale in her study of the personality of female adolescent incest victims. A significant factor in the McPhee and Wegner study that possibly lowered its validity is the fact that they studied only KFD styles.

Other researchers who have established KFD validity with particular variables are:

1. Sayed and Leaverton (1974) and Brannigan et al. (1982) identified the isolation of children by use of position, distance, and barrier variables.

2. Sobel and Sobel (1976) used 16 variables while endeavoring to discriminate between normal and adolescent males, finding 3 of the 16 variables significant, such as omissions of body parts and figures.

3. McGregor (1978) used 157 children divided into three treatment groups, but was not able to discriminate between the groups when analyzing their KFDs.

4. Meyers (1978) attempted to discriminate between normal and clinical populations by using activity levels of KFD figures.

5. Rhine (1978) failed to find validity in his study of high- and low-adjustment groups among 65 fourth- and fifth-grade students because of not controlling

variables such as intelligence, socioeconomic status, and discriminant validity of his test instrument--the California Test of Personality.

6. Raskin and Bloom (1979) identified perceptually delayed children by measuring KFD activity levels.

7. McCallister (1983) determined aggression in 275 male adolescent offenders by using activity levels of the KFD figures.

Although some studies have established KFD validity, others have been only partially successful. Shaw (1989) offered the following explanation for this: "(1) choice of variables studied, (2) sample size, (3) choice of criterion measure, (4) failure to control such variants as intelligence, socioeconomic status, and age among control groups, and (5) inaccurate definitions of clinical groups" (p. 23).

Comparison of Human Figure and Kinetic Family Drawings

Di Leo (1973) addressed what is termed the cognitive-affective ratio of human figure drawings. HFDs have been correlated fairly well with standardized measures of intelligence; however, the drawing of self within the KFD does not correlate to the same high degree. The human figure drawn in an HFD is often superior to the figure of self drawn in a KFD. This is because a child,

when asked to draw a person, usually responded with his or her concept of a body-image component that is largely cognitive as well as affective. In comparison, in the family drawing the child will be attenuated by other emotional-affective elements that produce an inferior figure; thus, the cognitive-affective ratio in the HFD differs greatly from that in the KFD.

Di Leo (1983) agreed with Koppitz (1968) that the cognitive-affective ratio indicates that the child, while drawing, concentrates less on what is known and more on what he or she may feel about family members. Burns (1982) agreed with Machover (1949), labeling the DAP or HFD as an expression of the self within the environment (nuclear self); whereas the KFD presents the expression of self as it is formed early in family life (environmental self).

Chase (1987) compared HFDs and KFDs of sexually molested children ages 5 to 16 and found HFDs more clearly differentiate between sexually abused and non-abused children than do KFDs. Significant variables in HFDs were: (1) large eyes; (2) mouth emphasis; (3) long neck, arms, hands, and fingers; (4) omission of clothing; (5) phallic objects; (6) gender ambiguity; and (7) differences in environmental scores. Those significant in KFDs include: (1) nurturance of self, (2) nurturance of mother, and (3) size of siblings.

Rodgers (1992) studied the sexual symbols, actions, and themes in children's KFDs and HFDs. She posed three research questions (p. 7), the first of which is, "Are sexual symbols, themes, and actions included as a part of the child's normal developmental and maturation process?" The results of her study "suggest the normalcy for children of different ages and sex include different sexual symbols, themes, and actions in their drawings" (p. 205). Her findings include: (1) drawings by children ages 6 to 8 have the highest number of sexual characteristics; (2) 9- to 15-year-old's drawings have the least sexual characteristics; (3) by age 16, children again include more sexual characteristics in their drawings. Rodgers concludes that although males and females include "more sexual items in their drawings at earlier ages than previously thought," there also appears to be little difference between the drawings of boys and girls, "although girls tend to include more detail and make fewer omissions" (p. 205).

The second question Rodgers asked was, "Are the same sexual symbols, themes, and actions included in the HFD and KFD?" The results of her study indicate that whereas children's HFD and KFD drawings are similar,

> they contain many of the same sexual symbols, themes, and actions. . . . Characteristics expected to be present in the HFD cannot always be expected to appear in the KFD. The HFDs will be an expression of how the child feels about self or wishes the self could be. The KFD expresses more

> the way the child views his or her own family or his or her place in the family.
>
> Children appear to allow themselves more freedom in drawing the HFD. They are able to include more details and seem to be more expressive as far as qualitatively different. The child expresses his lack of confidence or feelings of insignificance within the family--and/or guilt or shame concerning the family--by few details or very small persons. He may express his hostility via a very large person, persons, or detail. (p. 206)

Rodgers third question was, "Are the sexual symbols, themes, and actions which appear in the children's drawings an indication of past or present sexual experiences, including self-reported media exposure?" From her research she concludes that the "sexual symbols, themes, and actions which appear in the children's drawings are an indication of past-sexual experiences" (pp. 206-207).

It was further concluded that the drawings of children who had unusual sexual experience either as perpetrator or victim were very sexual or asexual. Such children included in their drawings much detail, especially of a sexual nature, or drew only very basic drawings that omitted all detail.

Rodgers also found that KFDs and HFDs are very similar quantitatively, but differ qualitatively. She found that many items scored on one test might be scored on the other, especially in the non-clinic population drawings. Rodgers reports that KFDs appear to give more intra-family relationship material, which indicates how

the child perceives his or her family and the subjects in it. Rodgers' research indicates this qualitative difference between KFDs and HFDs in her study:

> Children who appear to be uncomfortable in their family, sometimes refuse to draw, drew only stick figures, drew only very small so as not to have to include facial expression or body parts, or drew a simplistic drawing which gave the impression of an outline of the family with no real detail. These same children often were able to draw a very detailed HFD. (p. 192)

Rodgers concludes:

> Characteristics expected to be present in the HFD cannot always be expected to appear in the KFD. The HFD will be an expression about how the child feels about self or wishes self to be. The KFD expresses more the way the child views his or her own family and his or her own place in the family. (p. 206)

Summary

The magnitude of child sexual abuse is alarming. Even though it is receiving increasingly greater attention in the professional community, there is concern that it is underreported, undetected, referred to diversionary programs for treatment under the condition that no charges be filed, or is dismissed for a variety of reasons.

Sexual offenders can be adults as well as male, latency, or preschool, including female as well as male. They can be victims of sexual abuse themselves, but most victims do not become offenders. Mental health professionals do not know why some child victims grow up to become perpetrators and some do not, nor do we know why

some offenders appear to have no sexual abuse or maltreatment in their backgrounds.

Human figure drawings have become one of the most widely used techniques psychologists use in working with children. Because projective drawings enable an emotionally disturbed child to unwittingly reveal potential problems, they may be useful in identifying potential juvenile sexual offenders. HFDs have been found to more clearly differentiate between sexually abused and non-abused children, but KFDs have yielded more positive results in terms of using drawings to understand children.

There is apparently little research involving juvenile sexual offenders and projective drawings. The need for further research is strongly indicated.

CHAPTER III

PROCEDURES AND METHODOLOGY

Introduction

This chapter describes the type of research, procedures, and methodology that were used to collect, analyze, and interpret the data for this study. Included are sections describing the population and sample, instrumentation, data collection, and data analysis procedures.

Type of Research

This comparative and descriptive study was conducted to provide information on the perceptions of self and family relationships of male juvenile sexual offenders as revealed in their KFDs and HFDs. It also included a comparison between the juvenile sexual offenders and a group of male nonclinical, nonspecial-education adolescents. Part of the study was quantitative in nature in order to provide information for quantitative analysis.

Population and Sample

Child and adolescent males between the ages of 8

and 17 living in Western Oregon and Southwestern Washington were used in this study. Two categories of subjects were selected: (1) a general nonclinical, nonspecial-education population that consisted of 401 individuals drawn from both parochial and public schools; and (2) a population of 49 known juvenile sexual offenders.

The schools and number of subjects from each are as follows: (1) parochial schools--Central Valley Junior Academy, 18; Emerald Junior Academy, 23; Meadow Glade Adventist Elementary, 17; Portland Adventist Elementary, 97; Rogue River Junior Academy, 31; Sutherlin Christian Elementary, 13; Tualatin Junior Academy, 47; and (2) public schools--Central Valley Junior High, 18; Elmira High School, 29; Foster Elementary, 31; and Sweet Home High School, 95.

The juvenile sexual offender population was drawn from clients who were county mental-health out-patients. HFDs and KFDs were a part of the normal client intake-assessment process prior to treatment.

Instrumentation

To assess the traits projected by the subjects, which may be indicators that the drawers are sexual abusers or potential sexual abusers, two instruments were used in this study: the Kinetic Family Drawing (KFD) and the Human Figure Drawing (HFD). Both are projective

assessment tools. A description of the development, validity, and reliability of these instruments was given in chapter 2.

Kinetic Family Drawing

Burns and Kaufman together developed two volumes that are useful in description and diagnosis when working with KFDs: Kinetic Family Drawings (K-F-D): An Introduction to Understanding Children through Kinetic Drawings (1970) and Actions, Styles, and Symbols in Kinetic Family Drawings (K-F-D): An Interpretive Manual (1972). In 1982 Burns published Self-Growth in Families: Kinetic Family Drawings (K-F-D) Research and Applications.

The KFD has added action to the longer, more extensive use of family and human figure drawings. The kinetic feature contributes to the understanding of self within the family in addition to understanding the dynamics of the family relationship. In a KFD the subject represents his or her own view of the family, not how other family members may perceive the family structure. Additionally, primary disturbances are reflected more quickly and adequately through the use of the KFD than through probing techniques such as interviews, according to Burns and Kaufman (1972). Louise Bates Ames emphasized this conclusion: "The theory behind the KFD test has been throughout that the child's response, as seen in this test, can show often much better than his own words how he

feels about himself as a member of his family" (cited in Burns, 1982, p. vi).

Research using KFDs has been used with varied populations, including: (1) Black children/families (McKnight-Taylor, 1974; Shaw, 1989), (2) Chinese children (Cho, 1987; Nuttall, Chieh, & Nuttall, 1988), (3) Filipino children (Ledesma, 1979; Sims, 1979), (4) Black, Puerto Rican, and White families (Deren, 1975), (5) children from alcoholic parents (Gardano, 1988), (6) female adolescent incest victims (German, 1986), (7) male adolescent delinquents (McCallister, 1983; Sobel & Sobel, 1976), (8) children of step-families (Nelson, 1989), (9) Native American children (Gregory, 1992), (10) Chinese-American children (Chuah, 1992), (11) American-Lebanese children (Chartouni, 1992), and (12) sexual symbols, actions, and themes in children's KFDs from a normal population and sexual abuse victims and perpetrators (Rodgers, 1992).

Knoff and Prout (1985a) concluded that KFDs can have a universal usage:

> Generally, researchers have found the KFD a clinically useful technique that can identify behavioral and/or emotional issues among diverse populations, and that can discriminate between matched populations with and without important emotional issues or situations. (p. 52)

In their research using the KFD, Burns and Kaufman (1970) collected 10,000 KFDs, using them to identify variables of actions, symbols, styles, and characteristics. They identified 9 common actions and 90

styles, along with 14 additional clinical interpretations held in common with individual KFDs.

Human Figure Drawing

The HFD has become one of the most widely used projective techniques utilized by psychologists working with children as a means to analyze the subject for signs of unconscious needs, conflicts, and personality traits (Koppitz, 1968). For obtaining the HFD, a blank sheet of paper is given to the subject who is told to "draw a whole person, but not a stick or cartoon person."

Goodenough (1926) and Harris (1963) contended that the HFD is a reliable and valid instrument capable of measuring the cognitive abilities of individuals, especially children. Di Leo (1983), after long, widespread use of HFDs, confirmed this.

Studies have been conducted that indicate HFDs reveal the individual's impulses, anxieties, conflicts, and compensations significant to self. HFDs have been a useful instrument for detecting sexual abuse. Sidun and Rosenthal (1987) analyzed sexually abused adolescents' HFD drawings and found that several graphic indicators appeared commonly and consistently.

Miller et al. (1987) evaluated the HFDs of sexually abused children and found in them less symmetry and detail when compared to drawings from a normal child population. Whereas they found victims' drawings

dramatized the trauma they experienced, they also found they helped identify what had happened to the victims. When the drawings of children and adolescents were studied, HFDs were found to be able to discriminate between those sexually abused and those not sexually abused (Chase, 1987; Sidun, 1986; Verdon, 1987). Chase recommended more research be done with KFDs and sexually abused children because she found KFDs did not reveal as significant results as the HFD.

Rodgers (1992, p. 208) believes clinicians "should understand that the HFDs and KFDs are very similar quantitatively, although there are differences qualitatively." She further indicates: "Clinicians should not be as concerned about omissions of body parts in the KFD as in the HFD" (p. 209).

Variables

The independent variable was general/offender population.

Three major categories of dependent variables were tested for their presence in the subjects' drawings to be analyzed in this study:

1. Emotional symbols, themes, and actions giving evidence of nurturing, cooperation, communication, and distancing between the self in the drawing and the father and mother figures

2. Behavioral symbols, themes, and actions of aggression

3. Sexual symbols, themes, and actions.

These items were selected from previous studies that identified their potential behaviors in the areas of sexuality, aggression, and emotional distancing.

Table 5 contains the variables used for the analysis of the KFDs obtained from the subjects in this study. Included are variables taken from: the modified version of the Burns and Kaufman scoring system as developed by Cho (1987) and Habenicht (personal communication 1991); Koppitz's (1968) list of potential Emotional Indicators; and sexual symbols and behavioral indicators (Chase, 1987; Di Leo, 1970, 1973; German, 1986; Gil & Johnson, 1993; Mottinen, 1988; Rodgers, 1992; Ryan & Lane, 1991; Shaw, 1989).

Long neck, genitals, and secondary sex characteristics were included because earlier researchers found such sexual symbols to be significant in Kinetic Family Drawings (Chase, 1987; German, 1986; Mottinen, 1988; Rodgers, 1992; Shaw, 1989).

Dangerous objects and dangerous activities were included because they are often connected with the behaviors of juvenile sexual offenders. They are symbols of aggressive behaviors that are characteristic of

TABLE 5

KINETIC FAMILY DRAWING VARIABLES

Omissions	Sizes
Facial features Body Arms Hands Feet Mother Father	Long neck Large hands Large feet Gross asymmetry of limbs Poor integration of body parts
Nurture	**Aggressive Signs/Behaviors**
By father By mother	Dangerous objects (guns, knives, weapons) Dangerous activities (kicking, shooting) Teeth
Distancing	**Barriers**
From father From mother	Self and Mom Self and Dad Mom and Dad
Miscellaneous	
Genitals Secondary sex characteristics (breasts, beards) Blackening/Shading Figure slanting 15°+ Like to live in family	

molesters (Di Leo, 1970, 1973; Gil & Johnson, 1993; Ryan & Lane, 1991).

The list of HFD variables, Table 6, is a modification of Koppitz's list of Emotional Indicators as listed in chapter 2 on p. 87. The 31 dependent HFD variables include four sexual symbols and behavioral indicators that were included in the KFD Scoring Sheet. Both the KFD Scoring Sheet and the HFD Scoring Sheet are found in Appendix F.

Procedure

General population subjects were obtained at parochial and public elementary, junior high, and high schools within the sample area of Western Oregon and Southwestern Washington.

The Educational Superintendent of the Oregon Conference of Seventh-day Adventists was personally contacted by telephone. The purpose of the dissertation study was carefully explained along with the request for permission to obtain KFDs and HFDs from students within the Seventh-day Adventist parochial school system in the Oregon Conference. The superintendent, in response to this request, wrote a letter granting "permission to L. Curtis Miller of Linn County Mental Health Services and Andrews University to obtain human figure and kinetic family drawings from students 7 to 17 years of age in selected Oregon Conference schools" (Appendix H).

TABLE 6

HUMAN FIGURE DRAWING VARIABLES

Omissions	Quality Signs
Eyes Mouth Arms Feet Nose Body Legs Neck	Poor integration of figure parts Gross limb asymmetry Slanting figure Transparencies Shading of face Shading of hands/neck Shading of body/limbs
Sizes	**Special Features**
Tiny head -1/10th total height Long neck Long arms Large hands Large feet Short arms Arms w/o hands/fingers Tiny figure -2" Big figure +9"	Legs pressed together Genitals Secondary sex characteristics (breasts and beards) Blackening/Shading Teeth Dangerous objects (guns, knives, weapons) Dangerous activities/behaviors (hitting, kicking, shooting)

A copy of this letter was presented to principals of 10 church schools selected from rural, small town, and urban populations within the Oregon Conference. Nine principals gave a positive response to the request to obtain drawings from their schools.

I conducted a Week of Spiritual Emphasis in five of the nine parochial schools, during which time I

personally interviewed students and obtained drawings from them using the following four steps:

1. Authorization for the Administration of Kinetic Family Drawing and Human Figure Drawing general population forms (Appendix G) were given to parents, where required, to grant permission for their child to participate in supplying KFDs, HFDs, and demographic information. In the State of Oregon, children 13 years of age and above are legally able to give their own permission. Drawings were obtained from those children who volunteered to supply KFDs, HFDs, and demographic information. In cases where parents refused permission, drawings were not obtained.

2. Drawings were obtained individually from each child. The child was seated at a desk or table. A plain white sheet of 8 1/2 by 11-inch paper and a soft lead pencil were given to each subject with the verbal instructions to draw a KFD as follows:

> 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--SOME KIND OF ACTION. (Knoff & Prout, 1985a, p. 4)

After the KFD was completed and collected, the subject was given a second sheet of paper on which to draw an HFD. The verbal instructions were:

> ON THIS PIECE OF PAPER, I WOULD LIKE YOU TO DRAW A WHOLE PERSON. IT CAN BE ANY KIND OF A PERSON YOU WANT TO DRAW, JUST MAKE SURE THAT IT IS A WHOLE

PERSON AND NOT A STICK FIGURE OR A CARTOON FIGURE. (Koppitz, 1968, p. 6)

3. After the drawings were completed and collected, I proceeded to gather from the subject the necessary information for the Demographic Questionnaire (Appendix F).

4. The two drawings and the demographic questionnaire with proper identification marked on each were then stapled together and placed in a manila envelope.

In the case of the four parochial schools where I did not personally obtain the drawings, a packet was sent to each principal. The packets contained the following materials necessary for obtaining the drawings: (a) Authorization for the Administration of Kinetic Family and Human Figure Drawings, (b) Procedure for Obtaining Kinetic Family and Human Figure Drawings, (c) Demographic Questionnaire, and (d) an ample supply of 8 1/2 by 11-inch sheets of plain white paper for drawing purposes (Appendix G). Principals, or their designates, were asked to follow the same steps 1 through 4 that I followed for obtaining drawings from the students.

I personally contacted the Superintendent of Sweet Home School District No. 55, State of Oregon. The purpose of the dissertation study was carefully explained and permission requested to obtain drawings from students within this district.

The principals of the schools within District No. 55 voted to grant permission for drawings to be obtained in their schools. The superintendent wrote a letter dated August 9, 1994, granting this permission (Appendix H).

An elementary school, a junior high school, and two high schools were selected from which I personally interviewed and obtained drawings from students. These schools were selected because in the course of my official duties as Mental Health Specialist II with Linn County, Oregon, Mental Health Services, I was assigned to provide services to these schools. My involvement in small group dynamics in the public schools allowed me to access students to interview and obtain drawings.

The drawings from the clinic population of juvenile sexual offenders were obtained from clients of the Child and Family Unit of Linn Country, Oregon, Mental Health Services. Obtaining such drawings was authorized by the supervisory staff of Linn County Health Services to be a part of the regular client intake process for juvenile offenders. Written permission to obtain these drawings was granted by the Administrator of Linn County Department of Health Services (Appendix H).

The procedure for obtaining drawings from the clinic population was the same as outlined in steps 1

through 4 above. In cases where I did not personally interview and receive drawings from a subject, a packet similar to that sent to the parochial school principals was provided to all counseling therapists on the Child Mental Health Unit Staff who cooperated in the research project.

The drawings were done individually where drawings could be obtained in a confidential manner. To further ensure confidentiality, no names were placed on any drawings or demographic information sheets. Each subject was identified by a code number assigned to his school and by the initials of the one who collected the data and stapled the drawing and the demographic information together. Collectors of data numbered each of the drawings sequentially after their initials. The drawings were placed in sealed manila envelopes.

Scoring

The drawings were rated and scored according to the variables indicated on the KFD and HFD Scoring Sheets (Appendix F).

Preliminary Research

In 1992, under the direction of Dr. Donna Habenicht, Professor of Educational and Counseling Psychology, Andrews University, Kristin Batchelder, a fellow counseling psychology doctoral student, and I re-

analyzed KFDs collected by Peggy Rodgers (1992) for her doctoral dissertation, "A Correlational-Developmental Study of Sexual Symbols, Actions, and Themes in Children's Kinetic Family and Human Figure Drawings." The KFDs and identifying information were randomly selected from 420 subjects. Seventeen identified juvenile sexual offenders, ages 12 to 16, from residential centers were selected, and 36 adolescent males, ages 12 to 16, from public and private schools were also selected to represent the general population of adolescent male nonoffenders. All drawings had been completed by adolescent males from Southwest Michigan. The KFDs were scored for 94 variables; the scoring system included a modified version of the Burns and Kaufman scoring systems (Burns, 1980). In addition, the KFDs were scored for shading, similar treatment of figures, erasures and crossed-out figures, rotated figures, dangerous objects, distancing from significant figures, and blackening or shading of body parts or figures (Knoff & Prout, 1985a).

Using multiple regression, it was determined that the best single predictor for identifying male adolescent sexual perpetrators was the distance the self is placed in the drawings from the significant figures of mom and dad ($\underline{R}^2$ = .19287, Significant $\underline{F}$ at the .05 level = .002). The best overall model for prediction of adolescent male offenders included nine predictors ($\underline{R}^2$ = .75245,

Significant F at the .05 level = .0000): Dad's feet, Dad's activity level, Dad's communication level, Mom's expression, Mom's hands, Mom's masochism, shading, rotated figures, and the subjective score of "Like to Live in Family."

Hypotheses

The following null hypotheses were tested:

1. For each separate Kinetic Family Drawing variable, there is no significant difference in the response patterns of child/adolescent sexual offenders and the general population.

2. There is no linear combination of Kinetic Family Drawing variables that significantly discriminates between child/adolescent sexual offenders and the general population.

3. For each separate Human Figure Drawing variable, there is no significant difference in the response patterns of child/adolescent sexual offenders and the general population.

4. There is no linear combination of Human Figure Drawings that significantly discriminates between child/adolescent sexual offenders and the general population.

Statistical Analysis

Each drawing was scored and tallied according to

the variables of the KFD and HFD scoring systems. Hypotheses 1 and 3 were then tested by using Chi-square Analysis. Hypotheses 2 and 4 were tested using Discriminant Analysis. The hypotheses were tested at the .05 significance level.

Summary

This comparative and descriptive study provided information on the perceptions of self and family relationships of male juvenile sexual offenders as revealed in their KFDs and HFDs. It included a comparison between the juvenile sexual offenders and a general group of nonclinical male adolescents. All subjects were between the ages of 8 and 17. The 401 nonclinic population was taken from parochial and public schools in rural, small towns, and urban areas of Western Oregon and Southwestern Washington. The 49 clinic population of juvenile sexual offenders was obtained from clients of the Child and Family Unit of Linn County, Oregon, Mental Health Services.

Two projective techniques were used to assess which traits projected in the drawings may be indicators that the subjects are sexual abusers or potential sexual abusers. These assessment tools were the Kinetic Family Drawing and the Human Figure Drawing.

The kinetic feature of the KFD contributes to the understanding of self within the family in addition to

understanding the dynamics of the family relationship. Primary disturbances are reflected more quickly and adequately through the use of the KFD than through probing techniques such as interviews.

The HFD is widely used as a means to analyze the subject for signs of unconscious needs, conflicts, and personality traits. It reveals the individual's impulses, anxieties, conflicts, and compensations significant to self.

The KFD scoring system used in this study is a modified version of the scoring system of Burns and Kaufman as developed by Cho (1987) and Habenicht (personal communication, 1991). The HFD scoring system used in this study is based primarily on Koppitz's (1968) list of Emotional Indicators. The variables for both the KFD and the HFD also include emotional indicators (Koppitz, 1968), sexual symbols (Chase, 1987; German, 1986; Mottinen, 1988; Rodgers, 1992; Shaw, 1989), and behavioral indicators (Di Leo, 1970, 1973; Gil & Johnson, 1993; Ryan & Lane, 1991). These emotional, behavioral, and sexual symbols, themes, and actions were selected from previous studies that identified potential behaviors in the areas of sexuality, aggression, and emotional distancing.

Authorization was received from administrators and parents, and drawings were obtained from those children who volunteered to supply KFDs, HFDs, and demographic

information. These were collected, assigned code numbers, and placed in sealed manila envelopes to ensure confidentiality. Each drawing was scored and tallied, and the data were statistically analyzed by Chi-square Analysis and Discriminant Analysis to test the hypotheses.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

Chapter 4 presents the tabulation and discussion of the distribution of raw data obtained from the Kinetic Family and Human Figure Drawings by both the general and offender populations.

This chapter is divided into three sections: (1) demographic data, including a table of age frequencies; (2) results of the testing of the four null hypotheses, using Chi-square and Discriminant Analyses, with supporting tables and statements of conclusion and discussion of major findings for each; and (3) a summary statement.

Demographic Data

Population

Subjects for this study were males ranging in age from 8 to 17 years. The general population sample of 401 subjects was taken from students in parochial and public elementary, junior high, and high schools in Western Oregon and Southwestern Washington. The clinic population of 49 sexual offenders was taken during the intake session

with offenders who were clients of the Child and Family Unit of Linn County, Oregon, Mental Health Services. This renders a total sample population of 450.

General population drawings were from: 385 Caucasians, 18 Orientals, 16 Hispanics, 11 Blacks, 9 Native Americans, and 11 others (such as Hawaiians and Samoans). Because each non-caucasian group was a small number of the total sample, ethnicity was not one of the variables analyzed.

In this study, all of the juvenile offenders listed themselves as Caucasians on the Demographic Questionnaire. This is because of the socio-ethnic issues prevalent in the geographic area where this research was done. Some of the offenders could have been Caucasian-Native American or Caucasian-Hispanic. Due to the racial stigma attached to these groups in Eastern Linn County, it is the norm for many minority children and adolescents to deny their racial heritage.

The geographic area where the majority of the public school drawings were obtained is statistically unique with highly elevated levels of unemployment, abuse of alcohol and drugs, incest, divorce, step-parent, single-parent and blended families, and pre-marital and extra-marital pregnancies. Children of such circumstances, when interviewed for the demographic data for this study, often did not know their true parentage.

For this reason, subjects who appeared confused as to there parentage were instructed to draw their KFDs based on "the family members currently living in your home."

Initially, female offenders were to be studied; however, during the time period that drawings were gathered, only two female juvenile sexual offenders came into treatment at Linn County Mental Health. This was not a sufficient number of females to include in the research; therefore, this study addressed only males.

Age Frequencies

Table 7 gives the frequency distribution by age for both the KFDs and HFDs. It indicates that the distribution of age in the general and offender samples is far from proportionate. This could cause concern as to whether there might be interaction between sample group and age. Appendix F contains Tables 52 and 53 indicating the percentage response in each category for 5 comparisons: (1) the total sample as studied and presented in this chapter; (2) a comparison of the 12 years-old and younger and 13 years-old and older age groups for the general sample; (3) a comparison of the same-age groups for the offender sample; (4) a comparison of the general vs. offender for the 12 years-old and younger age group; and (5) a comparison of the general vs. offender for the 13 years-old and older age group. The percentages are presented for any variable for which any one of the

TABLE 7

KFD AND HFD AGE FREQUENCIES:
GENERAL VS. OFFENDER

Age	General		Offender		Total[a]	
	No.	%	No.	%	No.	%
8	20	(5.8)	2	(4.1)	22	(4.9)
9	52	(13.0)	3	(6.1)	55	(12.2)
10	46	(11.5)	5	(10.2)	51	(11.2)
11	70	(17.5)	4	(8.2)	74	(16.4)
12	75	(18.7)	1	(2.0)	76	(16.9)
13	49	(12.2)	6	(12.2)	55	(12.2)
14	45	(11.2)	5	(10.2)	50	(11.1)
15	25	(6.2)	7	(14.3)	32	(7.1)
16	9	(2.2)	10	(20.4)	19	(4.2)
17	10	(2.5)	6	(12.2)	16	(3.6)

[a] $n = 450$.

comparisons is significant. In the first three columns an asterisk has been placed to indicate significant age differences do not occur for the same variables as are significant in column 1. In studying the data in that table special attention should be given to significant difference. It will be noted that the figures relating to several variables where age differences did show up, but were not related to the overall comparisons. These are: the KFD-face/dad and asymlmb and the HFD-large hands, large feet, and short arms. Therefore the figures in the table show that interaction between age and offender groups is not a major problem.

However, it should be noted that, in some cases, the significant overall differences are due to one or the other of the age groups, and it is not strongly evident in the other. For example, in the KFD, the variable face/dad is significant in the 13 years-old and older age group, but not in the 12 years-old and younger age group. On the HFD, the variable large hands is significant in the 12 years-old and younger age group, but not in the 13 years-old and older age group.

Testing the Four Hypotheses

Each hypothesis is examined separately, and supporting data for each are presented. Each of the hypotheses is stated in the null form. Certain variables are relevant only if one or both parents are in the home.

Where one or both parents were essential to the analysis, these variables were studied.

Hypothesis 1

Hypothesis 1 states: For each separate Kinetic Family Drawing variable, there is no significant difference in the response patterns of sexual offenders and the general population.

Hypothesis 1 was tested by Chi-square Analysis for each of the 43 variables of the Revised KFD Analysis. For each test, one dimension was offender/general and the other the presence or absence of the feature. The analyses were undertaken for the following subsamples: All subjects, Both parents in home, Father present in home, and Mother present in home. Table 8 indicates the subsample frequencies in the relationship of the general

TABLE 8

KFD SUBSAMPLE FREQUENCIES:
GENERAL VS. OFFENDER

Subsample	General	Offender	Total
All subjects	401	49	450
Both parents in home	373	43	416
Father figure in home	376	45	421
Mother figure in home	398	47	445

population to the offender population. Table 9 presents the key to the KFD variables in this study.

Table 10 shows the computation by Chi-square Analysis for all the subsamples. Significant p was set at .05, with 1 degree of freedom for all variables except the last three, which involve barriers between significant individuals and have 4 degrees of freedom. Although the four subsamples were very similar to each other, there were differences among the analyses with respect to which of the variables indicate significance.

A total of 20 KFD variables, as shown in Table 10, were significant with a $p < .05$. Of these variables, significant differences for all the subgroups were found on 7 variables. The interpretation of the 20 significant variables with their contingency tables is herewith given in the order they appear in Table 10. The contingency tables for each subgroup appear in Appendix A.

TABLE 9

KEY TO THE KFD VARIABLES USED IN THIS DISSERTATION

Code	Variable
	Omission of facial features:
face/slf	Self
face/mom	Mom
face/dad	Dad
	Omission of body:
body/slf	Self
body/mom	Mom
body/dad	Dad
	Omission of arms:
arms/slf	Self
arms/mom	Mom
arms/dad	Dad
	Omission of hands:
hand/slf	Self
hand/mom	Mom
hand/dad	Dad

Code	Variable
-asymlmb	Gross asymmetry of limbs
-bodyint	Poor integration of body
nurt/dad	Nurture by father
nurt/mom	Nurture by mother
dist/dad	Distancing from father
dist/mom	Distancing from mother
genitals	Genitals
2ndsexch	Secondary sex characteristics

Table 9--Continued.

Code	Variable
	Omission of feet:
feet/slf	Self
feet/mom	Mom
feet/dad	Dad
dad/pres	Father figure in drawing
mom/pres	Mother figure in drawing
	Long neck:
lgnecksf	Self
lgneckmo	Mom
lgneckda	Dad
	Large hands:
bighndsf	Self
bighndmo	Mom
bighndda	Dad
	Large feet:
bigftslf	Self
bigftmom	Mom
bigftdad	Dad

Code	Variable
shading	Blackening/Shading
fig/slan	Figure slanting 15°
LLIF	Like to live in family
dangerob	Dangerous objects (guns, knives)
dangerac	Dangerous acitivities (kicking, shooting)
teeth	Teeth
barsf/mo	Barriers between self/mother
barsf/da	Barriers between self/father
barmo/da	Barriers between mother/father

TABLE 10

KFD CHI-SQUARE ANALYSIS:
GENERAL VS. OFFENDER

Variable	All subjects n = 450		Both parent/home n = 416		Father pres/home n = 421		Mother pres/home n = 445	
	x^2	p	x^2	p	x^2	p	x^2	p
face/slf	1.075	0.2998	0.709	0.3997	0.479	0.4888	1.413	0.2345
face/mom	0.061	0.8049	0.072	0.7884	0.413	0.5203	0.015	0.9030
face/dad	3.540	0.0599	2.538	0.1111	1.895	0.1686	4.423	0.0355*
body/slf	0.044	0.8330	0.000	1.0000	0.000	1.0000	0.075	0.7848
body/mom	5.144	0.0233*	1.454	0.2279	4.078	0.0435*	2.319	0.1278
body/dad	5.135	0.0234*	1.756	0.1852	1.532	0.2158	5.651	0.0174*
arms/slf	0.451	0.5017	0.759	0.3837	0.629	0.4278	1.093	0.2957
arms/mom	3.349	0.0673	1.982	0.1592	4.612	0.0317*	1.229	0.2677
arms/dad	6.385	0.0115*	1.362	0.2431	2.485	0.1150	4.990	0.0255*
hand/slf	1.602	0.2056	2.513	0.1129	2.765	0.0963	1.391	0.2382

Table 10--Continued.

Variable	All subjects n = 450 x^2 p	Both parent/home n = 416 x^2 p	Father pres/home n = 421 x^2 p	Mother pres/home n = 445 x^2 p
hand/mom	2.784 0.0952	2.750 0.0973	3.926 0.0475*	1.840 0.1750
hand/dad	16.788 0.0000*	11.940 0.0005*	14.290 0.0002*	14.476 0.0001*
feet/slf	1.663 0.1972	3.813 0.0509	3.190 0.0741	2.075 0.1497
feet/mom	4.702 0.0301*	4.218 0.0400*	5.684 0.0171*	3.415 0.0646
feet/dad	4.045 0.0443*	2.904 0.0884	0.193 0.1387	5.012 0.0252*
dad/pres	4.729 0.0297*	5.626 0.0177*	5.282 0.0215*	5.151 0.0232*
mom/pres	5.841 0.0157*	3.849 0.0498*	8.044 0.0046*	2.258 0.1330
lgnecksf	0.658 0.4174	0.385 0.5347	0.238 0.6256	0.890 0.3455
lgneckmo	4.485 0.0342*	3.940 0.0472*	3.019 0.0823	5.584 0.0181*
lgneckda	0.001 0.9812	0.323 0.5698	0.211 0.6460	0.006 0.9392
bighndsf	0.092 0.7621	0.020 0.8874	0.004 0.9501	0.146 0.7023

Table 10--Continued.

Variable	All subjects n = 450 x^2 p	Both parent/home n = 416 x^2 p	Father pres/home n = 421 x^2 p	Mother pres/home n = 445 x^2 p
bighndmo	0.000 1.0000	0.000 0.9932	0.039 0.8444	0.000 1.0000
bighdnda	1.907 0.1673	0.415 0.5193	0.513 0.4737	1.733 0.1880
bigftslf	0.000 1.0000	0.000 1.0000	0.000 1.0000	0.000 1.0000
bigftmom	0.039 0.8431	0.000 1.0000	0.008 0.9299	0.000 1.0000
bigftdad	0.044 0.8330	1.163 0.2808	1.020 0.3124	0.075 0.7848
-asymlmb	0.227 0.6337	0.690 0.4061	0.325 0.5685	0.528 0.4674
-bodyint	3.590 0.0581	3.128 0.0769	3.156 0.0756	3.565 0.0590
nurt/dad	3.307 0.0690	2.238 0.1347	2.584 0.1079	2.946 0.0861
nurt/mom	4.650 0.0311*	2.586 0.1078	3.083 0.0791	4.085 0.0433*
dist/dad	6.115 0.0134*	7.867 0.0050*	6.673 0.0098*	7.211 0.0072*
dist/mom	20.953 0.0000*	20.400 0.0000*	21.566 0.0000*	19.780 0.0000*

Table 10--Continued.

Variable	All Subjects n = 450		Both parent/home n = 416		Father pres/home n = 421		Mother pres/home n = 445	
	x^2	p	x^2	p	x^2	p	x^2	p
genitals	1.580	0.2088	1.702	0.1921	1.623	0.2027	1.650	0.1989
2ndsexch	0.000	1.0000	0.000	1.0000	0.000	1.0000	0.000	1.0000
shading	0.232	0.6298	0.772	0.3795	0.525	0.4688	0.398	0.5328
fig/slan	2.931	0.0869	3.865	0.0493*	3.425	0.0642	3.299	0.0693
LLIF	68.040	0.0000*	60.678	0.0000*	63.730	0.0000*	65.134	0.0000*
dangerob	5.315	0.0211*	6.678	0.0098*	6.216	0.0127*	5.699	0.0170*
dangerac	5.049	0.0242*	6.492	0.0108*	6.076	0.0137*	5.420	0.0199*
teeth	2.084	0.1489	1.065	0.3020	0.910	0.3400	2.319	0.1278
barsf/mo	3.467	0.4829	2.935	0.5687	2.935	0.5687	3.467	0.4829
barsf/da	4.239	0.3747	3.654	0.4548	3.965	0.4108	3.915	0.4176
barmo/da	9.215	0.0559	9.747	0.0449*	9.747	0.0449*	9.215	0.0559

* $p < 0.05$.

Omission of Facial Features on Father (face/dad)

Omission of the face of the father figure was significant in only 1 of the subsample groups: Mother present. Table 11 indicates offenders are 1.5 times as likely to omit the face of the father figure than are general subjects.

TABLE 11

OMISSION OF FACIAL FEATURES ON FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	119	(29.7)	104	(27.9)	105	(27.9)	118	(29.6)
Offender	21	(42.9)	17	(39.5)	17	(37.8)	21	(44.7)
p	0.0599		0.1111		0.1686		0.0355*	

* $p < 0.05$.

Omission of Body of Mother (body/mom); Omission of Body of Father (body/dad)

In Tables 12 and 13, the sample group, All Subjects, was significant in connection with one other subsample. In this study, offenders were 2.5 times more likely than the general population to omit the mother's body from the drawing when the father figure was present in the home. In contrast, offenders are 2.2 times more

likely than the general population to omit the body of father when the mother figure was present in the home.

TABLE 12

OMISSION OF BODY OF MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	25	(6.2)	21	(5.6)	23	(6.1)	23	(5.8)
Offender	8	(16.3)	5	(11.6)	7	(15.6)	6	(12.8)
p	0.0233*		0.2279		0.0435*		0.1278	

* $p < 0.05$.

TABLE 13
OMISSION OF BODY OF FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	39	(9.7)	26	(7.0)	26	(6.9)	39	(9.8)
Offender	10	(20.4)	6	(14.0)	6	(13.3)	10	(21.3)
p	0.0234*		0.1852		0.2158		0.0174*	

* $p < 0.05$.

Omission of Arms on Father (arms/dad); Omission of Arms on Mother (arms/mom)

Offenders were more likely to omit arms of mother when father was present in the home, as shown in Table 14. This variable was significant only in the subsample of Father present, where offenders were 2 times more likely than the general population to omit arms on mother in their KFDs.

TABLE 14

OMISSION OF ARMS ON MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	30	(7.5)	25	(6.7)	27	(7.2)	28	(7.0)
Offender	8	(16.3)	6	(14.0)	8	(17.8)	6	(12.8)
p	0.0673		0.1592		0.0137*		0.2677	

* $p < 0.05$.

Table 15 indicates offenders were more likely to omit arms on father when the mother figure was present in the home. In the All subject and Mother present subsample, offenders omitted arms of father approximately twice as often as did the general subjects. This variable was not significant in the other 2 subsample groups.

TABLE 15

OMISSION OF ARMS ON FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	41	(10.2)	28	(7.5)	28	(7.4)	41	(10.3)
Offender	11	(22.4)	6	(14.0)	7	(15.6)	10	(21.3)
p	0.0115*		0.2431		0.1150		0.0255*	

* $p < 0.05$.

Omission of Hands on Mother (hand/mom); Omission of Hands on Father (hand/dad)

Table 16 shows that omission of hands on mother figure was significant only in the subsample of Father present. In this case, offenders were 1.46 times more likely to omit mother's hands than were the general population.

TABLE 16

OMISSION OF HANDS ON MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	132	(32.9)	118	(31.6)	120	(31.9)	130	(32.7)
Offender	22	(44.9)	19	(44.2)	21	(46.7)	20	(42.6)
p	0.0952		0.0973		0.0475*		0.1750	

* $p < 0.05$.

Offenders were approximately twice as likely as general subjects to omit hands on the father figure. This variable was found to be significant in all the sample groups, as shown in Table 17.

TABLE 17

OMISSION OF HANDS ON FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	127	(31.7)	111	(29.8)	112	(29.8)	126	(31.7)
Offender	30	(61.2)	24	(55.8)	26	(57.8)	28	(59.6)
p	0.0000*		0.0005*		0.0002*		0.0001*	

* $p < 0.05$.

Omission of Feet on Mother (feet/mom); Omission of Feet on Father (feet/dad)

Tables 18 and 19 show that offenders were more likely than general subjects to omit feet on mother and father in their drawings. On the average, offenders omitted feet on father approximately 45% of the time, especially when the mother figure is present in the home. The general population, in comparison, omitted father's feet about 30% of the time. The percentages for offenders/general population omitting feet on mother were very similar.

TABLE 18

OMISSION OF FEET ON MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	119	(29.7)	108	(29.0)	110	(29.3)	117	(29.4)
Offender	22	(44.9)	19	(44.2)	21	(46.7)	20	(42.6)
p	0.0301*		0.0400*		0.0171*		0.0646	

* $p < 0.05$.

TABLE 19

OMISSION OF FEET ON FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	123	(30.7)	109	(29.2)	110	(29.3)	122	(30.7)
Offender	22	(44.9)	18	(41.9)	18	(40.0)	22	(46.8)
p	0.0443*		0.0884		0.1387		0.0252*	

* $p < 0.05$.

Mother Figure in Drawing (mom/pres); Father Figure in Drawing (dad/pres)

Omission of the mother, as shown in Table 20, was not a significant variable when the mother figure was present in the home. In the All subjects and the other 2 subsamples, offenders were 4.5 times more likely than the general population to omit the mother figure from their drawings. Offenders, as shown in the All subjects subsample of Table 21, were 2.5 times more likely than the general population to omit the father figure from their KFDs. This variable was significant in all 4 subsamples.

TABLE 20

OMISSION OF MOTHER FIGURE

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	10	(2.5)	5	(1.3)	8	(2.1)	7	(1.8)
Offender	5	(10.2)	3	(7.0)	5	(11.1)	3	(6.4)
p	0.0157*		0.0498*		0.0046*		0.1330	

* $p < 0.05$.

TABLE 21

OMISSION OF FATHER FIGURE

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	Nc	%	No.	%	No.	%	No.	%
General	26	(6.5)	7	(1.9)	7	(1.9)	26	(6.5)
Offender	8	(16.3)	4	(9.3)	4	(8.9)	8	(17.0)
p	0.0297*		0.0177*		0.0215*		0.0232*	

* $p < 0.05$.

Long Neck on Mother (lgneckmo)

Offenders drew long necks on mother 1.7 times as often as did the general population, as shown in Table 22. This variable was significant in all the groups except the subsample of Father present.

TABLE 22

LONG NECK ON MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	72	(18.0)	66	(17.7)	68	(18.1)	70	(17.6)
Offender	15	(30.6)	13	(30.2)	13	(28.9)	15	(31.9)
p	0.0342*		0.0472*		0.0823		0.0181*	

* $p < 0.05$.

Nurture by Mother (nurt/mom)

Lack of nurture by mother was significant in 38 of the 49 offender drawings, or about 75% of the time, compared to 248 of the 401 general population who did so about 62% of the time. Table 23 indicates this variable was significant only in All subjects and the Mother present subsample.

TABLE 23

LACK OF NURTURE BY MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	248	(61.8)	231	(61.9)	234	(62.2)	245	(61.6)
Offender	38	(77.6)	32	(74.4)	34	(75.6)	36	(76.6)
p	0.0311*		0.1078		0.0791		0.0433*	

* $p < 0.05$.

Distancing From Father (dist/dad)

Distancing self from the father figure also proved significant in all of the sample groups. Table 24 indicates that in the All subjects sample and Both parent subsample, offenders were approximately 3.5 times more likely than the general population to draw self distanced from the father figure. Offenders were 1.8 times more likely than the general subject to draw self distant from the father figure in the subsamples of Father in home and Mother in home.

TABLE 24

DISTANCING FROM FATHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	97	(24.2)	84	(22.5)	78	(20.7)	90	(22.6)
Offender	40	(81.6)	34	(79.1)	17	(37.8)	19	(40.4)
p	0.000*		0.000*		0.0098*		0.0072*	

* $p < 0.05$.

Distancing From Mother
(dist/mom)

Overall, offenders were 2.5 times more likely than the general population to draw self distanced from mother. Table 25 indicates that distancing self from the mother figure was a significant variable in all 4 sample groups.

TABLE 25

DISTANCING FROM MOTHER

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pre in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	74	(18.5)	70	(18.8)	70	(18.6)	74	(18.6)
Offender	23	(46.9)	21	(48.8)	22	(48.9)	22	(46.8)
p	0.000*		0.000*		0.000*		0.000*	

* $p < 0.05$.

Figure Slanting (fig/slan)

In this study, the variable Figure slanting in KFDs was significant in only 1 of the 4 subsamples: Both parents present. Table 26 shows that in this category offenders were twice as likely as the general population to draw slanting figures.

TABLE 26

FIGURE/SLANTING

Group	All subject n = 409		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	41	10.2	40	10.7	40	10.6	41	10.3
Offender	9	18.4	9	20.9	9	20.0	9	19.1
p	0.0869		0.0493*		0.0642		0.0693	

* $p < 0.05$.

Like to Live in Family (llif)

Table 27 indicates that Like to live in family was highly significant in all four sample groups at $p = 0.000$. The significance of this variable, in this study, correlates with the preliminary research project (chapter 3, pp. 126-127), which also found Like to live in family to be a significant variable in comparing general subject and offender KFDs.

A comparison of all the subjects and the 3 subsamples indicates that the evaluator was approximately 3.6 times more likely to prefer living in a general population home than in an offender home.

TABLE 27

LIKE TO LIVE IN FAMILY

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	97	(24.2)	84	(22.5)	86	(22.9)	95	(23.9)
Offender	40	(81.6)	34	(79.1)	36	(80.0)	38	(80.9)
p	0.000*		0.000*		0.000*		0.000*	

* $p < 0.05$.

Dangerous Objects/Activities (dangerob, dangerac)

Tables 28 and 29 indicate that in the KFDs of offenders, the presence of dangerous objects and dangerous activities were significant in differentiating them from the general population drawings. These two variables were significant in all subsample groups. Offenders were 3.5 times more likely to have dangerous objects in their drawings and 4 times more likely to draw dangerous activities than were the general population.

TABLE 28

DANGEROUS OBJECTS

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	15	(3.7)	14	(3.8)	14	(3.7)	15	(3.8)
Offender	6	(12.2)	6	(14.0)	6	(13.3)	6	(12.8)
p	0.0211*		0.0098*		0.0127*		0.0170*	

* $p < 0.05$.

TABLE 29

DANGEROUS ACTIVITIES

Group	All subject n = 450		Both parent in home n = 416		Father pres in home n = 421		Mother pres in home n = 445	
	No.	%	No.	%	No.	%	No.	%
General	11	(2.7)	10	(2.7)	10	(2.7)	11	(2.8)
Offender	5	(10.2)	5	(11.6)	5	(11.1)	5	(10.6)
p	0.0242*		0.0108*		0.0137*		0.0199*	

* $p < 0.05$.

Barriers Between Mother/Father (barmo/da)

Offenders were more likely than the general population to draw barriers between mother and father. Table 30 combines the subsamples of Both parents at home and Father figure in home because the data were the same

TABLE 30

BARRIERS BETWEEN MOTHER AND FATHER FIGURES: BOTH PARENTS AT HOME/FATHER FIGURE IN HOME

Barrier	General		Offender		Total	
	No.	%	No.	%	No.	%
No significant barriers	243	(66.4)	22	(59.5)	265	(65.8)
2/less persons between	46	(12.6)	2	(5.4)	48	(11.9)
More than 2 persons between	5	(1.4)	2	(5.4)	7	(1.7)
Hinders physical contact	13	(3.6)	0	(0.0)	13	(3.2)
Inhibits visual contact	59	(16.1)	11	(29.7)	70	(17.4)
Total	366	(100.0)	37	(100.0)	403[a]	(100.0)
n = 403 df = 4	Value = 9.747				p = 0.0449	

[a]The total population of these subsamples equals 416, but 13 subjects omitted a key person or persons in their drawings, thus causing incomplete data for analysis.

in both, and they were both significant at $p = 0.0449$. This variable was not significant in other sample groups.

Offenders were 3.9 times more likely than the general population to draw more than two or more persons between mother and father. However, the very small expected frequencies here, and the very small actual frequencies and percentatages cause one to view this result with caution. After that low expected frequency one would combine categories to avoid small expected frequencies. In this case I feel it is necessary to retain all these categories. It appears that Inhibits visual contact is the major reason for the significant Chi-square. Offenders drew KFDs with barriers that inhibited visual contact between mother and father 1.8 times more often than did the general population.

Major Findings

Chi-square Analysis found 20 of the 43 KFD variables to be significant at $p < .05$ when comparing the 401 general subject drawings with 49 offender drawings.

Offenders were more apt to: (1) omit the face of the father figure; (2) omit the body, arms, hands, and feet on the mother and father figures; (3) omit the father and mother figures; (4) draw a long neck on the mother figure; (5) draw a mother figure that shows lack of nurture; (6) draw distance between self and the mother and father figures; (7) draw slanting figures; (8) draw KFDs in which the evaluator would not like to live in the family; (9) draw dangerous

objects and activities; and (10) draw barriers between the mother and father figures. Based on these chi-square analyses, null Hypothesis 1 is rejected.

Hypothesis 2

Hypothesis 2 states: There is no linear combination of Kinetic Family Drawing variables which significantly discriminates between child/adolescent sexual offenders and the general population.

This hypothesis was tested by Discriminant Analysis. The discriminant function was significant for all four analyses, as is indicated in Table 31; therefore, null Hypothesis 2 is rejected. The same four variables in each analysis were most important in separating the groups. Those variables were selected where loadings were at least approximately 50% of the maximum loading.

Table 32 gives, for each analysis, the means of the general and offender groups on the discriminant function. In each case, the offender mean is higher than the general mean.

In addition, 20 of the 43 variables were significant. No one drawing had more than 16 of the 20 present. Table 33 shows a breakdown of the frequencies and percentages of the 20 variables present in individual drawings of the general and offender populations. The mean number of significant variables in the drawings of the general population was 4.1995 with a standard deviation of

TABLE 31

KFD DISCRIMINANT ANALYSIS, All SUBJECTS:
GENERAL VS. OFFENDER

Statistic	All subject	Both parent in home	Mother pres in home	Father pres in home
df	45	43	44	44
Eigenval	.4715	.4533	.4438	.4858
Lambda	.6796	.6881	.6926	.6730
Chi-sq.	164.367	146.744	154.615	156.195
p	< .00005	< .00005	< .00005	< .00005
Variable	Standardized discriminant loadings			
dist/mom	.88083	.98280	.85949	.99526
LLIF	.67611	.66661	.68348	.65751
dist/dad	-.53697	-.64914	-.51212	-.66627
hand/dad	.42415	.40869	.42287	.41229

TABLE 32

KFD GROUP MEANS

Group	All subject	Both parent in home	Father pres in home	Mother pres in home
General	-.23950	-.22806	-.24055	-.22841
Offender	1.95999	1.97829	2.00995	1.93416

TABLE 33

KINETIC FAMILY DRAWING SIGNIFICANT VARIABLES:
FREQUENCIES AND PERCENTAGES

Number of Significant Variables Present	General Population Number	Percentage	Offender Number	Population Percentage
16	1	0.2	1	2.0
15	0	0.0	0	0.0
14	2	0.5	0	0.0
13	2	0.5	0	0.0
12	2	0.5	2	4.1
11	4	1.0	0	0.0
10	6	1.5	5	10.2
9	13	3.2	9	18.4
8	16	4.0	5	10.2
7	23	5.7	7	14.3
6	38	9.5	6	12.2
5	42	10.5	2	4.1
4	69	17.2	6	12.2
3	61	15.2	3	6.1
2	70	17.5	2	4.1
1	43	10.7	1	2.0
0	9	2.2	0	0.0
Total	401	100.0	49	100.0

2.685. The mean number of the significant variables in the offender population was 7.0204 with a standard deviation of 2.954. Seventy-one percent of the general population had between 1 and 5 significant variables in their KFDs. In contrast, 65% of the offender population had between 6 and 10 significant variables in their KFDs. Therefore, null hypothesis 2 is rejected.

The Discriminant Analysis program classifies the subjects into the two groups--general or offender--as predicted by the discriminant function. Of the general group 86.5% were correctly classified into that group and 13.5% misclassified as offenders. Of the offender group 83.7% were classified as offenders and 16.3% misclassified as being in the general group. Overall 86.2% of the subjects were correctly identified as being in the offender or general group.

Major Findings

A KFD in which: (1) self is drawn more distant from the mother figure, (2) self is drawn less distant from the father figure, (3) factors within the drawing influence the evaluator to not like to live in the family, and which (4) omits the father figure's hands, is more likely to have been drawn by an offender than by a general subject.

In the Chi-square Analysis of Hypothesis 1, which looked at the variables independently, the significant variable, Distancing from father, was positive. In the

Discriminant Analysis of Hypothesis 2, which looked at the variables as a group, and was influenced by the intercorrelations among the variables, the sign of Distancing from father changed to negative. This is because in multivariate analysis the intercorrelations among the variables influence the selection of variables for the interpretation. The variables must be considered as a whole, not independently. This has been done in the interpretation on page 154. Thus, in their KFDs, offenders were more likely to draw self showing more distance from the the mother figure and less distance from the father figure.

Because the discriminant function was significant for all four analyses, null Hypothesis 2 is rejected.

Hypothesis 3

Hypothesis 3: For each separate Human Figure Drawing variable there is no significant difference in the response patterns of child/adolescent sexual offenders and the general population.

Hypothesis 3 was tested by Chi-square Analysis for each of the 31 dependent variables of the HFD Analysis. For each test one dimension was the 2 groups--general and offender populations--and the other was presence or absence of the feature. Table 34 gives the results of this analysis. Six of these variables proved significant in

TABLE 34

HFD CHI-SQUARE ANALYSIS:
GENERAL VS. OFFENDER

Variable	X^2	p
-Eyes	0.723	0.3951
-Mouth	0.105	0.7456
-Arms	0.033	0.8559
-Feet	0.085	0.7708
-Nose	0.413	0.5204
-Body	0.033	0.8559
-Legs	0.000	1.0000
-Neck	0.048	0.8264
Poor integration	0.059	0.8075
Gross asymmetry	0.963	0.3264
Figure slanting	0.079	0.7792
Transparencies	0.000	1.0000
Shading face	3.529	0.0603
Shading hands/neck	1.643	0.1999
Shading body/limbs	2.418	0.1200
Legs together	0.000	1.0000
Genitals	0.412	0.5208
2nd sex characteristics	1.098	0.2947

Table 34, Continued.

Variable	X^2	p
Blackening/Shading	4.152	0.0416*
Teeth	13.076	0.0003*
Dangerous objects	3.848	0.0498*
Dangerous activities	0.000	1.0000
Tiny head	0.056	0.8130
Long neck	3.771	0.0522
Long arms	0.362	0.5476
Large hands	9.506	0.0020*
Large feet	8.114	0.0044*
Short arms	13.652	0.0002*
Arms w/o hands/fingers	1.322	0.2503
Tiny figure	2.418	0.1200
Big figure	0.027	0.8705

* $p < 0.05$.

differentiating offender drawings from those drawn by the general population. Interpretation of the significant variables is made in the order they appear in Table 33. Contingency tables for the variables are shown in Appendix B. In this data n = 450 with 401 general population and 49 in the offender group.

Blackening/Shading

Table 35 indicates that the general population was 5.85 times more likely to use blackening/shading in their drawings than were offenders.

TABLE 35

BLACKENING/SHADING

Group	General	Offender	p
Present	46 (11.7)	1 (2.0)	
Omitted	355 (88.5)	48 (98.0)	0.0416*

* p < 0.05.

Teeth

Teeth were drawn by offenders more than 2 times as often as they were drawn by general subjects, as indicated in Table 36.

TABLE 36

TEETH

Group	General	Offender	p
Present	63 (15.7)	18 (36.7)	
Omitted	338 (84.3)	31 (63.3)	0.0003*

* p < 0.05.

Dangerous Objects

Table 37 indicates that offenders were 2.5 times more likely than the general population to draw dangerous objects in connection with their HFDs.

TABLE 37

DANGEROUS OBJECTS

Group	General	Offender	p
Present	23 (5.7)	7 (14.3)	
Omitted	378 (94.3)	42 (85.7)	0.0498*

* p < 0.05.

Large Hands

Offenders were approximately 3 times more likely to draw large hands on their HFDs than were the general population, as shown in Table 38.

TABLE 38

LARGE HANDS

Group	General	Offender	p
Present	31 (7.7)	11 (22.4)	
Omitted	370 (92.3)	38 (77.6)	0.0020*

* p < 0.05.

Large Feet

Table 39 shows that offenders were 3 times more likely to draw large feet on their HFDs than were general subjects.

TABLE 39

LARGE FEET

Group	General	Offender	p
Present	24 (6.0)	9 (18.4)	
Omitted	377 (94.0)	40 (81.6)	0.0044*

* p < 0.05.

Short Arms

In comparison to the general population, offenders were significantly more likely to draw short arms on their

HFDs. Table 40 indicates they drew short arms 2.6 times more often than did general subjects.

TABLE 40

SHORT ARMS

Group	General	Offender	p
Present	46 (11.5)	15 (30.6)	
Omitted	355 (88.5)	34 (69.4)	0.0002*

* $p < 0.05$.

Major Findings

This study found that when drawing a human figure, offenders, when compared to the general population, were more likely to draw (1) short arms; (2) teeth; (3) large hands; (4) large feet; (5) dangerous objects; and (6) less likely to draw with blackening/shading.

Chi-square Analysis found 6 of the 31 HFD variables to be significant at $p < .05$ when comparing the drawings of the 401 drawings of the general population with 49 drawn by child/adolescent sexual offenders. Based on these chi-square analyses, null Hypothesis 3 is rejected.

Hypothesis 4

Hypothesis 4 states: There is no linear combination of Human Figure Drawings that significantly

discriminates between child/ adolescent sexual offenders and the general population.

This hypothesis was tested by Discriminant Analysis. The discriminant function was significant as is indicated in Table 41. Therefore, null Hypothesis 4 is rejected. Seven variables would qualify for inclusion where loadings were at least 50%. However, genitals, whose weight is scarcely above 50%, should not be included. In this study, the drawing of genitalia by subjects was unusual, occurring in only 1 of the 401 drawings of the general population and 1 of the 49 offender drawings. The presence of genitalia alone is not significant.

The discriminant function places the offender population at the higher value when compared to the general population. The group means are:

1. General population -.16058
2. Offender population 1.31417.

There were 6 significant variables out of the possible 31. No one drawing had more than 3 of the 6 present. Table 42 shows a breakdown of the frequencies and percentages of the 6 variables present in the individual drawings of the general and offender populations. The mean of the significant variables in the drawings of the general population was .6584 with a

TABLE 41

HFD DISCRIMINANT ANALYSES, SIGNIFICANT VARIABLES: GENERAL VS. OFFENDER

Statistic	Value
df	31
Eigenvalue	.2120
Lambda	.8251
Chi-sq.	83.053
p	<.00005
Variable	**Standardized discriminant loadings**
Teeth	.51009
Large hands	.42919
Short arms	.39140
Arms w/o hands/fingers	.31062
Dangerous objects	.30594
Large feet	.28502

* $p < 0.05$.

standard deviation of .785. The mean of the significant variables in the drawings of the offender population was 1.1837 with a standard deviation of .950.

The Discriminant Analysis program classifies the subjects into the two groups--general or offender--as predicted by the discriminant function. Of the general group, 79.8% were correctly classified into that group and

TABLE 42

HUMAN FIGURE DRAWING SIGNIFICANT VARIABLES: FREQUENCIES AND PERCENTAGES

Number of Significant Variables Present	General Population Number	General Population Percentage	Offender Population Number	Offender Population Percentage
3	6	1.5	5	10.2
2	60	15.0	12	24.5
1	126	31.4	19	38.8
0	209	52.1	13	26.5
Total	401	100.0	49	100.0

20.2% misclassified as offenders. Of the offender group 67.3% were classified as offenders and 32.7 misclassified as being in the general group. Overall 78.4% of the subjects were correctly identified as being in the offender or general group.

Major Findings

The Discriminant Analysis indicates that, compared to the general population, offenders, tend to include more teeth, large hands, short arms, arms without hands/fingers, dangerous objects, large feet. Because the discriminant function places the offender population at the higher value, null Hypothesis 4 is rejected.

Summary

Chi-square Analysis was used to test Hypotheses 1 and 3; Discriminant Analysis was used to test Hypotheses 2 and 4. In using these tests, all four null hypotheses were rejected.

In testing Hypothesis 1, using chi-square, 20 of the 43 variables proved significant (Table 9). By this analysis, it was found that when the KFDs of offender and general populations were compared, offenders were more likely to draw pictures that: distanced self from parent figures, omitted parent figures, had barriers between parent figures, had dangerous objects and activities, omitted bodies, arms, and feet on parent figures, omitted hands on father, had a long neck on mother, showed lack of nurture by mother, had slanting figures, and led me to choose not to like to live in the family.

Discriminant Analysis (Table 31) on KFDs indicates that offenders, when compared to general subjects, were more likely to have the following combined characteristics in their drawings: self drawn more distant from the mother figure, self drawn less distant from the father figure, factors within the drawing that influence the evaluator to not like to live in the family, and omission of the father figure's hands.

The Chi-square Analysis to test Hypothesis 3

(Table 34) showed that when the HFDs of offenders were compared with a general population, offenders were more likely to draw short arms, teeth, large hands and feet, dangerous objects, and less likely to draw with blackening/shading.

In testing Hypothesis 4, Discriminant Analysis found offenders, when compared to the general populations, were more likely to include teeth, large hands, short arms or arms without hands or fingers, dangerous objects, large feet.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 presents a summary of this study, discussion and implications of the findings, and recommendations for further research.

Summary

Statement of the Problem

Sexual offenders are one of the significant populations needing therapeutic or preventive interventions. Juveniles constitute a sizable portion of the offender population. Identifying the incidence and prevalence of juvenile sexual offenders involves many unknown variables. There is a need for identifying potential or past juvenile sexual offenders to aid in applying preventive and therapeutic measures.

During the second half of this century, clinicians have made use of projective drawings to aid in assessment and diagnosis. Examples of the use of projective drawings for these purposes include: (1) sexual symbols in drawings (Kinget, 1952; Ogdon, 1986; Rodgers, 1992), (2) studying family dynamics (O'Brien & Patton, 1974), (3) children's conflicts and self as part of family (Alessandrini, 1985),

(4) family structure (Gardano, 1988), (5) identifying sexually abused children (German, 1986; Hackbarth, 1988), (6) identifying adolescent male delinquents (Sobel & Sobel, 1976), (7) sexual abuse of children (Burns, 1982; Koppitz, 1984; Ogdon, 1986), (8) increase in sexual abuse of children (Banning, 1989; Finkelhor, 1986; Paden-Gelster & Feinauer, 1988), and (9) difficulty in diagnosing sexual abuse of children (Kohn, 1987).

Despite the current and widespread use of children's drawings for the purpose of assessment and diagnosis, it has not been previously shown which characteristics can be expected to be significant in differentiating drawings of juvenile sexual offenders from those of the general juvenile population.

Overview of the Related Literature

During the 1980s, mental health professionals recognized sexual abuse as a major societal problem. Child sexual abuse, during this same decade, emerged as an epidemic problem for our nation (Hindman, 1991). Researchers in the area of child sexual abuse indicate child sexual abuse victims were estimated to be one in six of all Americans. This estimate included 20% to 50% of all women (Alter-Reid et al., 1986; Kohn, 1987), and the number is increasing (Banning, 1989; Kempe & Kempe, 1984; Kohn, 1987; Paden-Gelster & Feinauer, 1988). Finkelhor (1986) believes that, on the average, child sexual abuse

is 21% for females and 7% for males. Finkelhor and Dzuiba-Leatherman (1994) maintain that children are more likely to be sexually abused than adults, with the rates of assault, rape, and robbery against 12- to 19-year-olds being 3 times higher than for the adult population. Kilpatrick (1992) found that 60% of rapes occur before the victim reaches 18; thus rape is a 5-fold higher risk for children.

Sexual abuse is an extremely complex, multidetermined problem that is beyond the province of any single discipline. The issues of sexual abuse are manifold: cultural, social, political, economic, legal, medical, psychological, educational, and spiritual. For these reasons, a multidisciplinary approach to combat sexual victimization is needed (Sgroi, 1989).

Juveniles constitute a sizable segment of those committing child sexual abuse. The rate of juvenile sexual offending is alarming in magnitude (Kempe & Kempe, 1984). Adult offender self-reports indicate that over 50% of adult sexual offenders began their sexual molestation before age 18 (Abel et al., 1984). It is estimated that 8% of all males in the general population are sexually abused by a juvenile prior to age 18 (Ryan & Lane, 1991). Teenagers committed at least 55% of reported sexual offenses of male children (Showers et al., 1983). From

15% to 25% of female sexual abuse victims are being molested by juveniles (Farber et al., 1984).

Juvenile sexual offenders come from the whole population spectrum. There are no currently proven psychological profiles differentiating juvenile offenders from those who do not molest. The clinical data pertaining to the diagnosis and treatment of sexual offenders are sparse; therefore, research in these areas is needed (Sgroi, 1989).

Although the majority of juvenile sexual offenders achieve at least average grades, a significant number have learning problems, as well as emotional-behavioral and affective or attention-deficit disorders (Ryan & Lane, 1991).

The majority of sexual offenders have likely witnessed sexual abuse, or have been sexually abused in their own homes, in foster homes, or in institutions where they have been kept (Sgroi, 1989).

Groth and Oliveri (Sgroi, 1989) assert offenders differ from nonoffenders by their unconventional interests or activities. These basic differences are: sexual orientation, frequency of sexual behaviors, and attitudes toward sexuality.

Gil and Johnson (1993) state that the characteristics of juvenile sexual offenders can be placed in three categories: characteristics of family and

environment, characteristics of parents, and characteristics of children (pp. 46-51). These researchers divide children into four groups, based on the level of their sexual behaviors: (1) children with normal sexual explorative behaviors, (2) sexually reactive children, (3) children with extensive mutual sexual behaviors, and (4) children who molest.

Projective drawings, which enable an emotionally disturbed child to unwittingly reveal potential problems, have been used for the psychological study of children for many years (Burns & Kaufman, 1972; Di Leo, 1970; Goodenough, 1926; Knoff, 1983; Koppitz, 1984; Ogdon, 1986). Rapaport (1947) indicates projective drawings allow the drawer to nonverbally express individual feelings and attitudes.

The use of HFDs in the assessment of children's cognitive abilities, developmental abilities, and emotional state have been recognized for many decades (Alschuler & Hattwick, 1947; Anastasi & Foley, 1940; Bender, 1937; Buck, 1948; Burns & Kaufman, 1970, 1972; Dennis, 1966; Despert, 1938; Di Leo, 1983; German, 1986; Goodenough, 1926; Hammer, 1958; Harris, 1963; Hulse, 1951; Koppitz, 1968; Machover, 1949; Raven, 1951; Reznikoff & Reznikoff, 1956; Rodgers, 1992; Shearn Russell, 1969).

HFDs have also been used to compare sexually molested children with a non-abused child population (Howe

et al., 1987; Rutkin, 1988; Sidun, 1986; Sidun & Rosenthal, 1987; Verdon, 1987). These researchers helped identify the characteristics abused children might frequently draw.

The KFD adds the kinetic dimension to projective drawings for assessment purposes. KFDs have been used for many purposes, such as: examining children's conflicts and self in family, studying family structure and dynamics, identifying sexually abused children, and identifying adolescent male delinquents (Alessandrini, 1985; Gardano, 1988; Hackbarth, 1988; O'Brien & Patton, 1974; Sobel & Sobel, 1976). Some authors hypothesized that the presence of sexual symbols and/or actions in drawings could evidence sexual molestation or psychopathology. There have been numerous studies involving sexual characteristics, symbols, themes, and actions (German, 1986; Hackbarth, 1988; Jordon, 1985; Kinget, 1952; Mottinen, 1988; Ogdon, 1986; Rodgers, 1992; Shaw, 1989; Stawar & Stawar, 1987).

Purpose of the Study

The purpose of this study was to determine if Kinetic Family Drawings and Human Figure Drawings of 8- to 17-year-old males can be used to differentiate between child and adolescent sexual offenders, and the child and adolescent general population.

Methodology

Sample

The general population subjects for this study consisted of males from private schools and public schools in Western Oregon and Southwestern Washington. The clinical population of known male juvenile sexual molesters was drawn from clients at Linn County, Oregon, Mental Health Services. All subjects were between the ages of 8 and 17 years. In each sample are subjects from each year of those ages.

Instrumentation

A demographic questionnaire was prepared (Appendix E) and interview/drawing sessions were set up to obtain the research data from each subject for this study. Each subject was asked to draw a KFD first, and then an HFD. In the case of the general population, the demographic information was obtained after the drawings were completed. Because the offender population was accessed through Linn County Mental Health Services, much of the demographic data were already supplied within the forms filled out when the client applied for mental health services. Any residual demographic information that was needed for the research questionnaire was obtained during the intake process when the drawings were usually obtained.

The KFD, a projective technique developed by Burns and Kaufman (1970) as an outgrowth of the already often-used HFD, was administered by asking the subject to "Draw a picture of everyone in your family, including you, doing something."

Earlier researchers, such as Knoff and Prout (1985b), concluded the KFD to be a clinically useful technique. The reliability and validity of the KFD have been criticized for lack of scientifically accountable normative data (Conoley & Kramer, 1989). Recent studies by researchers at Andrews University have produced added knowledge concerning KFD and HFD validity and reliability (Cho, 1987; German, 1986; Shaw, 1989; Rodgers, 1992).

After drawing the KFD, the subject was requested to "Draw a whole person." Here again, the HFD is a projective technique that Goodenough (1926, 1928) believed to be a reliable and valid measure of children's cognitive abilities. Later researchers (Di Leo, 1970; Harris, 1963; Koppitz, 1968; Machover, 1949) added their confirmation of HFD reliability and validity.

Analysis of Data

For this study there were two research questions:

1. Can child and adolescent sexual offenders be identified by analyzing their Kinetic Family Drawings and Human Figure Drawings?

2. What are the significant indicators, if such

sexual offenders can be identified using the Kinetic Family Drawings and Human Figure Drawings?

Both questions led to the testing of each of the four hypotheses in this study. Hypotheses 1 and 3 were each tested by Chi-square Analysis, while Hypotheses 2 and 4 were tested by Discriminant Analysis. With the significance level set at .05, all four of the null hypotheses were rejected.

Discussion of Findings

The findings of this study are summarized by considering each of the four null hypotheses tested. Certain variables are relevant only if one or both parents are in the home. Where one or both parents were essential to the analysis, these variables were studied.

Hypothesis 1

Hypothesis 1 states: There is no linear combination of Kinetic Family Drawing variables that significantly discriminates between child/adolescent sexual offenders and the general population.

This hypothesis was tested by Chi-square Analysis for each of the 43 variables of the Revised KFD Analysis. For each test, one dimension was offender/general and the other the presence or absence of the feature. The analyses were undertaken for: All subjects, Both parents in home, Father present in home, and Mother present in

home. At the .05 significance level, 20 of the 43 variables proved to be significant in differentiating between the KFDs of juvenile sexual offenders and the general population.

These 20 variables are discussed in their approximate descending order of significance, the exception being with some variables being discussed together because of their relativity to each other.

Like to Live in Family (LLIF)

The variable LLIF was scored subjectively, based on the evaluator's impression of the family as portrayed in the KFD. In scoring LLIF, the evaluator considered the overall quality of: facial expressions, body posturings, behavioral actions, types of activities (fun, safe/ dangerous, conducive to "family closeness"), and amount of interaction between/among family members. Based on these rather subjective criteria the evaluator determined whether he would "like to live in the family" portrayed in each drawing.

LlIF was highly significant in the negative direction in the All subjects sample, as well as in all 3 subsamples. The evaluator determined he would like to live in 304 of the 401 general population families (75.8%), in comparison to liking to live in only 9 (18.4%) of the 49 offender families.

Distancing From Mother (dist/mom); Distancing From Father (dist/dad)

Distancing from mother was highly significant, at $p = .0000$, in all of the sample groups. Distancing from father was also significant in all the groups. Overall, 91 of 401 general subjects (22.7%) drew self distant from father, and 74 (18.5%) drew distance from mother. Offenders were more likely to draw distance from parent figure, and more so from the mother figure than from the father. Among offenders, almost half (23, or 46.9%) drew self distant from the mother figure, while 19 (38.8%) distanced self from the father.

Father Figure in Drawing (dad/pres); Mother Figure in Drawing (mom/pres)

Offenders were significantly more likely to omit parent figures from their KFDs than were the general population. Omission of father figure was significant in all 4 groups. Omission of mother was significant in All subject, Both parents in home, and Father present in home. In the All subjects group, 16.3% omitted the father figure and 10.2% omitted the mother, compared to the general population who omitted only 6.5% of the father figures and 2.5% of the mothers.

Barriers Between Mother and Father (barmo/da)

The KFDs were scored for barriers between self and the father figure and the mother figure. Neither of these variables was significant in All subjects or any of the subgroups. Barriers were also scored between the mother and father figures; this variable proved significant in 2 subgroups: Both parents present and Father present.

Within the data of these 2 subgroups there are both similarities and differences between general subjects and offenders. Similar numbers in each population drew no barriers between the parent figures. This was so with 66.4% of the general population and 59.5% of the offenders. Whereas 12.6% of general subjects drew two or less persons between parent figures, less than half that percentage of offenders (5.4%) drew the same. Among offenders, 5.4% drew over two persons between the parent figures, compared to 1.4% of the general population. About twice as many offenders (29.7%) than general subjects (16.1%) drew factors that inhibited visual contact between parent figures in the KFDs.

There are differences between the populations in the way barriers were/were not drawn between significant persons, particularly parent figures, in the KFDs. It appears that although over 50% of both populations drew no barriers between parent figures, many others, in both groups, have ambivalent feelings toward parents,

especially when they portray both parents in their drawings.

Families in which juveniles offend often lack attachments, and family members appear very disconnected (Ryan & Lane, 1991). Sexual offense on the part of a male juvenile may represent an attempt to create distance in the mother/son relationship and overcome rigid controls (Lankester & Meyer, 1986).

It is my assumption that distancing from mother and father are also related to offenders being more likely to not draw mother or father in their drawings. This is assumed because distancing from parents, or not including them in their drawings, indicates how offenders view their parents, how offenders see themselves in relationship to their parents, and how they feel about them.

Di Leo (1973, p. 108) says, "'Forgetting' to include a family member is expressive of a negative attitude towards that person, rejection, or symbolic elimination."

Gil and Johnson (1993) describe the relationship of Group III and Group IV juveniles (See Tables 2 & 4, pp. 57 & 62) and their parent-figures in this way:

> These children [who molest] . . . become more aggressive in their demands as they become more angry, resentful, and distrustful of the people in their environment. . . . The parents of these children may be victims of child sexual abuse and emotional abuse and are unclear about how to appropriately relate to their children. . . . These children usually do not get along with adults. . . .

> Adults are usually seen as annoying and interfering unless they have something to offer the child. (pp. 84-85)

These authors indicate juvenile molesters often feel totally disconnected from family members. They feel isolated and alone. They may not have family members who care about them. In view of their feelings of being isolated and cut off from significant family members, it appears logical for child molesters to either omit father and/or mother from their drawings or to draw parent figures with significant distance from self.

Barriers, which can be a form of distancing, are symbolic of the relationship between parents, as the offending juvenile views them. A dysfunctional parental relationship could be a contributing factor in motivating male juveniles to sexually offend.

Dangerous Objects (dangerob) and Dangerous Activities (dangerac)

Offenders are 3.2 times more likely than general subjects to draw dangerous objects in their KFDs. They are 3.7 times more likely to draw dangerous activities.

Di Leo (1970, p. 164) posits that "towards the end of the latency period, boys will often reveal contained hostility and aggression in their selection of articles with which they adorn their figures: guns, knives, swords." Profusion of weapons, according to Di Leo, constitutes a sexual symbol by means of which the child

unconsciously indicates the area of disturbance. He also says (1973) that hostility may be expressed by the use of weapons or other material directed at the adversary. If weapons and dangerous objects in a drawing are indicators of sexual symbols, aggression, and areas of disturbance, a logical progression would be that dangerous activities could probably follow. Dangerous activities, then, would be the perseveration of sexual symbols, aggression, and areas of disturbance found in dangerous objects in children's drawings.

Gil and Johnson (1993) state that the sexual behaviors of juveniles who molest (Group IV children) go far beyond developmentally appropriate childhood exploration or play. Their thoughts and actions are often pervaded with sexuality. Their molesting behaviors both continue and increase over time and become a part of a consistent pattern rather than isolated incidents. The shared decision making and lighthearted curiosity in the sex play of Group I children, who display normal sexual exploration behaviors, is absent in children who molest. Instead, there is an impulsive, compulsive, and aggressive quality to the behavior. Children who molest often link sexual acting-out to feelings of anger. These molesting children seek out victims who are easy to fool, bribe, or force into sexual activity.

In the assessment process of juvenile sexual offenders, the degree of aggression/overt violence is a prime factor for consideration, according to Ryan and Lane (1991), who say:

> There are many forms of aggression for the adolescent sex offender. As well as the presence of weapons, the offender's response to the victim distress or the presence of intent to inflict pain, verbal, physical, and indirect forms of aggression should also be considered. The assessor should also rate the degree of aggression or overt violence in the offender's intended offense and preceding fantasies. (p. 224)

Omission of Facial Features on Father (face/dad)

Offenders were found to be 1.5 times more likely to omit the face of the father figure than were the general population. In this study, omission of the face included omission of eyes, nose, and mouth. According to Koppitz (1968, 1984), the omission of eyes is a rare phenomenon and of great clinical significance, for the eyes are the very first detail a child will add after drawing the head. Omission of the nose occurs significantly more often on the HFDs of special class pupils, shy youngsters, clinic patients, and children suffering from psychosomatic complaints. The nose has been identified as a phallic symbol and has been interpreted as a sign of masturbation guilt and castration anxiety. Mouths were more apt to be omitted by shy youngsters, clinic patients, special class pupils, poor students, and children with psychosomatic complaints.

Koppitz further indicates that the case histories of children who omitted the mouth have a high incidence of fear, anxiety, perfectionism, and depression.

Omission of Hands on Father (hand/dad); Omission of Hands on Mother (hand/mom)

Offenders were 1.46 time more likely to omit mother's hands than were the general population, and twice as likely to omit father's hands.

Omission of Arms on Father (arms/dad); Omission of Arms on Mother (arms/mom)

Offenders omitted the arms of the mother and father figures twice as often as general subjects.

Omission of Body of Father (body/dad); Omission of Body of Mother (body/mom)

Offenders omitted the body of mother 2.5 times as often as the general population, and omitted the body of father 2.2 times as often.

Omission of Feet on Mother (feet/mom); Omission of Feet on Father (feet/dad)

Offenders omit the feet of mother and father approximately 45% of the time, compared to about 30% of the time for the general population.

According to Koppitz (1968) omissions of body parts are most often found in the clinic population, although maturation by age is a varying factor. For example, "Omission of the body . . . occurred significantly more often on the HFDs of the clinic patients" (p. 67), is stated by Koppitz, without any reference to this omission being significant by age. In comparison she says, "Omission of the neck . . . did not become a clinically valid Emotional Indicator until age 9 for girls and age 10 for boys. Thereafter, it occurred significantly more often on the HFDs of the clinic patients" (p. 69). Regarding omissions in children's drawings, Di Leo (1970, 1973) maintains that omission of body parts is indicative of feelings, attitudes, and personality traits.

Sexually abused subjects often omit body parts in their drawings (Chase, 1987; German, 1986; Sidun, 1986; Sidun & Rosenthal, 1987). Since many molesters have been molested, we can expect offender drawings to have more omission of body parts.

According to Koppitz (1968), the omission of body occurred significantly more often in the drawings of clinic patients, brain-injured children, poor students, special-class pupils, and children who stole. Koppitz further maintains that among school-age children the omission of bodies in human figure drawings is a sign of

psychopathology reflecting any of the following: mental retardation, cortical malfunctioning, severe immaturity due to developmental lag, or emotional disturbances with acute body anxiety and castration fear.

Omission of father's hands is the third most significant variable in this study. Koppitz (1968, 1984) says lack of hands underlines helplessness. She lists omission of hands as an Emotional Indicator of insecurity and feelings of inadequacy. Di Leo (1973) indicates that the omission of hands is noteworthy because of their symbolic role as agents of aggression. By way of example, he says that where one of the parents, such as mother, is the disciplinarian, that parent's upper extremities would be emphasized in the drawing; conversely, the omission of such could then indicate the lack of that characteristic in drawings. Thus the omission of hands on father could indicate the lack of power on father's part, in the viewpoint of the drawer.

Omission of hands, or hands cut off, also occurs significantly more often in the drawing of clinic patients, brain-injured children, and special-class students (Koppitz, 1968). Figures without hands were drawn more often by shy children than by overtly aggressive children; but omission of hands occurred equally often in drawings by children who stole or had psychosomatic complaints. Lack of hands reflects feelings

of inadequacy or guilt over failure to act correctly or the ability to act at all. Buck (1948) believes the omission of hands is associated with masturbatory guilt.

Omission of arms is also found significantly more often in the drawings of the clinic population and in poor and special-class students (Koppitz, 1968). Di Leo (1973) states arms are a symbol of aggression. Koppitz found that aggressive children, and those who stole, omit arms from the figures in their drawings much more often than shy children or children with psychosomatic complaints. She agrees with Machover (1949) that omission of arms reflects anxiety and guilt over socially unacceptable behavior involving arms or hands. Machover also observes that the omission of arms reflects guilt over hostility or sexuality. Klepsch and Logie (1982) suggest arms signify power; therefore, lack of arms indicates a sense of powerlessness. Koppitz (1984) also suggests omission of arms to be an Emotional Indicator of feelings of insecurity and inadequacy. Offenders, by omitting arms on father and mother, appear to symbolically diminish the power of their parents.

According to Koppitz (1968), Omission of feet is not clinically significant in drawings until age 7 for girls or age 9 for boys. She believes that until children reach an age of being self-reliant and can stand on their own two feet, they are more apt to omit feet. After that

age, the omission of feet is found more often in the figures drawn by clinic patients and very shy children. Omission of feet reflects a general sense of insecurity and helplessness.

Feet, according to Klepsch and Logie (1982), indicate security; omission of feet would be indicative of insecurity. Koppitz (1968) says the omission of feet is found in drawings of both shy and aggressive subjects, indicating both groups are a bit "off balance" and lacking a sure footing. Koppitz (1984) also lists omission of feet as an Emotional Indicator of feelings of insecurity and inadequacy.

In this study, general subjects and offenders alike omitted feet more often on the mother and father figures than they did on self. Offenders, however, were significantly more likely than general subjects to omit feet on the mother and father figures. Since omission of feet is indicative of lack of security, balance, or sure footing, it is possible that offenders sense these characteristics in their parents.

Long Neck on Mother (neck/mom)

Offenders were 1.7 times more likely to draw a long neck on the mother figure than were the general population. A long neck, according to Chase (1987), is a sexual symbol. Rodgers (1992) included a long neck in her list of variables in her study of sexuality as determined

by sexual symbols. German (1986) found sexual symbols in 50% of the KFDs drawn by female adolescent incest victims.

The KFD variable of a long neck drawn on mother by offenders is a significant sexual implication of how the male juvenile offender views his mother figure.

Nurture by Mother (nurt/mom)

Offenders drew mother figures showing lack of nurture approximately 75% of the time, compared to the general population who did so about 62% of the time.

According to Gil and Johnson (1993):

> Children who molest are often the recipient of highly charged negative projections from the mother. The mother's anger at the child's father, of whom the child generally reminds her, may be displaced onto the child. . . . The mother may demand that the sexually aggressive child babysit or may blame the older child for things the younger child does. . . . The child's molestation of the younger child is often to retaliate against the mother for her lack of caring and love. Sexually aggressive children are aware, at least unconsciously, that they can impact the mother by hurting the child she favors. They generally feel totally incapable of impacting the mother directly. The relationship between mother and the children who molest is highly enmeshed and ambivalent. Although the child is very angry at the mother, the child loves and needs the mother's love, attention, and caring. . . . This can happen in natural, step, and blended families. . . . The children may feel totally disconnected from family members. . . . They feel isolated and alone. . . . They have no attachment figures and feel this loss. (pp. 84-86)

Based on this study, it is concluded that lack of nurture by mother is significant in the lives of juvenile sexual offenders.

Figure Slanting (fig/slan)

In this study, offenders were twice as likely as the general population to draw slanting figures. Drawings with figures slanting 15 degrees, or more, occurred significantly more often in pictures by clinic patients, brain-injured children, poor students, and special-class pupils, according to Machover (1949) and Koppitz (1968). Slanting figures are present in drawings made by both aggressive and shy children. Such figures suggest general instability and lack of balance. Machover hypothesized that slanting figures reflect feelings of mental imbalance and a personality in flux. Koppitz concludes that slanting figures are found fairly often in HFDs of both shy and aggressive subjects, suggesting both groups are a bit off balance and lacking a sure footing. She further states, "A slanting figure on the drawing of a child seems to indicate an unstable nervous system or a labile personality; above all, it suggests that the child lacks secure footing" (p. 59). Koppitz (1984) includes slanting figures as Emotional Indicators of feelings of insecurity and inadequacy.

Applying Chi-square Analysis to the 43 variables of the KFDs of 401 general subjects and 49 child/adolescent sexual offenders resulted in 20 proving significant; therefore, null Hypothesis 1 was rejected.

Hypothesis 2

Hypothesis 2 states: There is no linear combination of Kinetic Family Drawing variables which significantly discriminates between child/adolescent sexual offenders and the general population.

This hypothesis was tested by Discriminant Analysis, with the same variables having the greatest weight in the function in all 4 sample groups: All Subjects, Both Parents in Home, Father Figure in Home, and Mother Figure in Home. Discriminant Analysis of KFDs in this study indicates that an offender is more likely than a general subject to draw: (1) self more distant from the mother figure, (2) self less distant from the father figure, (3) factors within the drawing that influence the evaluator to not like to live in the family, and (4) the father figure without hands.

Young males who molest have ambivalent feelings toward their mother figure. Gil and Johnson (1993) have already been cited as to this in the discussion of lack of nurture by the mother figure (p. 186). They assert that juveniles who molest often received negative projections from the mother who is angry with the child's father, of whom the child generally reminds her. The child feels both anger and love toward this mother, but confusion is the result. These factors may lead the child to triangulate with the father figure against the mother,

which may account for the offenders drawing less distancing between self and father and more between self and mother.

Offenders may also see their father figures as more helpless, as indicated by omission of the hands of the father. Koppitz (1968, 1984) indicates that omission of hands is a symbol of helplessness and feelings of insecurity and inadequacy. Di Leo (1973) says that hands are a symbol of power. He also says the ineffectual parent may be depicted with small or even absent hands. As has been stated, offenders' mothers are often angry with the father figure. This anger is displaced onto the offending child, which causes both emotional distancing between mother and son and a decrease in nurture to him by the mother. The father figure is sometimes absent from the home, at least part of the time, and unable or unwilling to care for or protect the child. Thus, in the eyes of the offending child, father is emasculated and powerless to care for or protect.

Such a home, as described above, is probably highly dysfunctional. A young male offender who lives in such a home is more likely to draw factors in his KFD that would influence the evaluator to not like to live in the family.

A function was found by Discriminant Analysis that significantly separates the two groups of subjects. Therefore, null Hypothesis 2 was rejected.

Hypothesis 3

Hypothesis 3 states: For each separate Human Figure Drawing variable, there is no significant difference in the response patterns of child/adolescent sexual offenders and the general population.

Using Chi-square Analysis, with the presence or absence of the 31 variables of the HFD Analysis form as one dimension and the offender and general populations as the other, 6 significant variables were found. Offenders, as compared to general subjects, more frequently drew human figures with short arms, big hands and feet, teeth, and dangerous objects. Offenders less frequently drew human figures with blackening/shading than did general subjects.

Short arms, according to Koppitz (1968), are more common on the HFDs of clinic patients, children with psychosomatic complaints, special-class pupils, and shy youngsters. She believes this Emotional Indicator reflects a child's difficulty in reaching out into the world and toward others. Short arms may indicate a person is withdrawn, turned inward, and is trying to inhibit impulses. She also lists (1984) short arms as being an Emotional Indicator of shyness. Offenders possibly are

inhibited in being able to adequately express their emotional needs in a socially acceptable way, which leads to their withdrawing from wholesome relationships. They probably have difficulty in restraining their impulses, hence their unconscious effort to do so could be shown by the short arms drawn.

The presence of teeth on HFDs was the second most significant variable in discriminating between offenders and the general population. Koppitz (1968) found teeth present to a certain extent on drawings of both well-adjusted and poorly-adjusted pupils as well as those of all groups of clinic patients, with one exception: shy children, none of whom drew teeth. Because teeth on HFDs are relatively widespread, they are not considered a sign of serious pathology. However, Koppitz maintains that since they occur most often in drawings by overtly aggressive children, and not at all on those of withdrawn subjects, teeth must be a sign of aggressiveness. She maintains (1984) that any representation of one or more teeth to be an Emotional Indicator of anger and aggression. Because a fair amount of aggressiveness is present in normal children and is necessary for leadership and achievement, not all of aggressiveness is to be considered unhealthy. Koppitz, therefore, concludes that if no other Emotional Indicators are present on an HFD, teeth cannot be considered a sign of emotional

disturbance. Hence, when interpreting drawings involved with human figures, the total context of Emotional Indicators should be considered when appraising the presence of teeth. Koppitz further asserts that teeth have more serious implications on the drawings of adults than of children. Hammer (1958) suggests teeth may indicate both oral aggression and sadistic tendencies. Machover (1949) hypothesizes that the presence of teeth reveals infantile oral aggression. Koppitz stresses that these two hypotheses of Hammer and Machover are not considered valid in the case of children's drawings.

Large hands (Koppitz, 1968, 1984), which are found more often on the HFDs of clinic patients and special-class pupils, are an Emotional Indicator found more frequently on the drawings of overtly aggressive children and those who steal. Levy (1958) says big hands reflect compensatory behavior for feelings of inadequacy, manipulatory insufficiency, or difficulty making contact with others. Machover (1949) suggests big hands are typical for boys who are compensating for physical weakness or who feel guilty over the use of their hands. Large hands on offender drawings are consistent with the hypothesis that offenders are often aggressive (Ryan & Lane, 1991) and have ambivalent feelings that can cause both confusion and guilt (Gil & Johnson, 1993).

It has already been stated in this study (pp. 184-185) that omission of feet is indicative of insecurity and helplessness. Di Leo (1973) hypothesizes that human figure drawings represent a concept of body image and feelings. He describes small feet as a factor of instability. Conversely, large feet would then represent a seeking towards stability. Along with large hands, large feet could also be a symbol of aggression and anger. Feet, along with hands, can be used as dangerous objects involved with dangerous activities, both of which offenders tend to draw more often than does the general population.

Interestingly, in this study, blackening/shading was less likely to be present on the HFDs of the offender population than on those of general subjects. I am unable to entirely account for this. All experts, according to Koppitz (1968, 1984), maintain shading on HFDs to be a manifestation of anxiety, with the degree of shading related to the intensity of the anxiety. Koppitz cites Machover's observation that shading is normal on the HFDs of young children and is not necessarily a sign of psychopathology. However, shading takes on considerable diagnostic significance as children get older. It was the presence of blackening/shading as a special feature overall that was significant, and not the blackening/shading of any particular area of the HFD.

In this study, the significance of dangerous objects being present more often in offender drawings than in the general population was reinforced by this variable being significant in both KFDs and HFDs. Dangerous objects, as has already been stated (pp. 178-180), are highly suggestive of aggressive behavior on the part of the drawer. Seven of the 49 offenders (14.3%) drew dangerous objects on their HFDs, compared to only 23 out of 401 (5.7%) of the general subjects.

Six of 31 HFD variables were found significant by Chi-square Analysis; therefore, null Hypothesis 3 was rejected.

Hypothesis 4

Hypothesis 4 states: There is no linear combination of Human Figure Drawing variables that significantly discriminates between child/adolescent sexual offenders and the general population.

This hypothesis was tested by Discriminant Analysis, which found 7 of the 31 HFD variables to be of most importance in separating the two groups. This function finds that offenders, compared to general subjects, include more teeth, large hands, short arms, arms without hands/fingers, dangerous objects, large feet, and genitals.

Teeth, large hands, and large feet are symbols of aggressiveness (Koppitz, 1968, 1984). Dangerous objects

are also signs of aggressiveness (Di Leo, 1970). Short arms (Koppitz, 1968, 1984) are symbolic of shyness and of difficulty in reaching towards others on the part of a person who has problems within interpersonal relationships and is trying to inhibit impulses. The combination of these factors in an offender's HFD is indicative of a person who lives in conflict: He has strong impulses of aggressiveness (symbolized by teeth, large hands, and dangerous objects), which he strives to restrain (symbolized by short arms).

Hands cut off (or drawn without hands and fingers) are found more often on HFDs of clinic patients, brain-injured children, and special-class pupils. Shy children cut off hands and fingers more often that do the overtly aggressive. This factor appears equally often on drawings by children who steal and by those with psychosomatic complaints (Koppitz, 1968, 1984). Koppitz hypothesizes that the cutting of hands reflects feelings of insecurity and inadequacy, guilt over failure to act correctly, or the inability to act at all. Machover (1949) observes that such an omission indicates guilt feelings over behavior and possible castration anxiety. Koppitz (1968), in discussing omission of hands, concludes that this factor appears to be related to a wide variety of attitudes and anxieties, making it difficult, without further testing, to determine whether a child suffers from

feelings of mental or physical inadequacy and helplessness, from guilt and/or anxiety, or from a combination of all of these. Offenders drawing arms with hands/fingers cut off would appear to be consistent with their probably feeling inadequate, guilty over inappropriate actions, and having castration anxiety. An HFD having arms without hands or fingers is also consistent with one having short arms; the drawer is endeavoring to control impulsivity and inappropriate actions.

A function was found by Discriminant Analysis that significantly separates the two groups of subjects. Therefore, null Hypothesis 4 was rejected.

Conclusions

Analysis of the findings leads to the following conclusions, based on the two research questions proposed for this study:

1. Can child and adolescent sexual offenders be identified by analyzing their Kinetic Family and Human Figure Drawings?

The analyses applied to the 401 general and 49 offender population KFDs found 20 of the 43 variables (41.86%) to be significant.

The same analyses were applied to the HFDs of the same subjects. Chi-square Analysis found 6 of the 31 HFD variables (19.35%) to be significant. Discriminant

Analysis found offenders differed from general subjects in 9 of the 31 variables (32%).

These analyses suggest that child and adolescent sexual offenders may be identified by their KFDs and HFDs.

2. What are the significant indicators, if such sexual offenders can be identified using Kinetic Family Drawings and Human Figure Drawings? The analyses of the KFDs have shown that, when compared to general subjects, offenders: (1) draw more distance between the self and both parent figures; (2) are more apt to omit parent figures from their drawings; (3) draw more barriers between the mother and father figures; (4) draw more dangerous objects and activities; (5) draw significantly more omissions of father and mother's bodies, arms, and feet, and father's hands; (6) draw a long neck on mother; (7) show lack of nurture by mother; (8) draw figures that slant 15 degrees or more; and (9) draw pictures of families in which the evaluator would not like to live.

By the same analyses of the HFDs, offenders, when compared to general subjects, include more teeth, short arms, arms without hands/fingers, large hands and feet, dangerous objects, and genitals. Offenders draw less blackening/shading than do general subjects.

Recommendations

The findings and conclusions resulting from this

study lead to recommendations in two areas: practice and research.

Practice

1. In order to more effectually detect, diagnose, and treat child/adolescent sexual offenders, key professionals, such as counseling therapists, school personnel (administrators, nurses, counselors, and social workers), medical personnel (physicians, physician assistants, nurses, nurse practitioners, social workers), and clergy need to be aware of and knowledgeable about behaviors related to sex and sexuality in children and adolescents.

2. Clinicians working with child/adolescent sexual offenders who use their drawings for the purposes of assessment, detection, diagnosis, and treatment should know how to evaluate/interpret KFDS and HFDs. When assessing, diagnosing, and treating child/adolescent sexual offenders, clinicians should be aware of the usefulness of KFDs and HFDs, know how to administer and score them.

Research

1. Standardized methods of procedure for testing, scoring, and comparing results from research using KFDs need to be developed.

2. More research using projective drawings with

a significantly larger sample of offenders is needed. For example, the small offender sample in this study was unable to address questions connected with certain variables that proved significant, such as blackening/shading, transparencies, and dangerous objects (pp. 180-181).

3. This study covered a wide range of ages, from 8 to 17 years. Further research would do well to target a more narrow age range, because drawings of human figures have age and developmental factors that were not a major consideration in this study. All drawings in this study were scored by the same criteria, regardless of age. Koppitz (1968) indicates that age and sex are significant factors in evaluating children's HFDs. She says:

> Shading of the face on HFDs is quite unusual at any age level and is therefore a valid Emotional Indicator for all children age 5 to 12 . . . Shading of body and/or limbs . . . is common for girls through age 7 and for boys through age 8 (p. 57).

4. During the course of this study, I attended a seminar on juvenile sexual offenders, given by Dr. Toni Cavanagh-Johnson, who indicated children commit sexual offenses at ages much younger than is commonly supposed. She cited numerous cases of offenders as young as 5 to 7 years of age. Further research with children's projective drawings for this younger age bracket is needed.

5. This study did not adequately address the

parental factor in assessing the KFDs and HFDs of offenders. Further research is needed to determine whether there are significant differences in the drawings of offenders based on the parental factor, such as: both biological parents in the home, biological father/mother only in the home, step father/mother in the home, live-in boy/girlfriend in the home.

6. Research using/comparing the KFDs and HFDs of other members of the offender's family could be helpful.

7. More research with projective drawings in relation to the demographic factors in an offender's life is indicated, such as social, economic, educational, ethnic, cultural, and religious status.

8. This study addressed only males. Further research involving juvenile female offenders is indicated.

9. Not all children who are sexually molested become molesters themselves. However, more research is needed concerning the role of molestation in previous generations in an offender's family and the role of the offender also having been molested.

10. The role of the type of sexual offense in relation to significant variables in KFDs and HFDs needs further research to determine if different types of sexual molestation can be detected by the projective drawings.

11. The impact of therapeutic interventions on KFDs and HFDs could be the subject of further research, with pre/post-therapy drawings being compared.

APPENDIX

APPENDIX A

KFD CONTINGENCY TABLES; CHI-SQUARE ANALYSES

TABLE 43

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS, ALL SUBJECTS: GENERAL VS. OFFENDER

Variable	Present/ Omitted	General n = 401		Offender n = 49		df=1 p sig
face/slf	Present	265	(66.1)	36	(73.5)	
	Omitted	136	(33.9)	13	(26.5)	0.2998
face/mom	Present	277	(69.1)	33	(67.3)	
	Omitted	124	(30.9)	16	(32.7)	0.8049
face/dad	Present	282	(70.3)	28	(57.1)	
	Omitted	119	(29.7)	21	(42.9)	0.0599
body/slf	Present	376	(93.8)	45	(91.8)	
	Omitted	25	(6.2)	4	(8.2)	0.8330
body/mom	Present	376	(93.8)	41	(83.7)	
	Omitted	25	(6.2)	8	(16.3)	0.0233*
body/dad	Present	362	(90.3)	39	(79.6)	
	Omitted	39	(9.7)	10	(20.4)	0.0234*
arms/slf	Present	375	(93.5)	44	(89.8)	
	Omitted	26	(6.5)	5	(10.2)	0.5017
arms/mom	Present	371	(92.5)	41	(83.7)	
	Omitted	30	(7.5)	8	(16.3)	0.0673
arms/dad	Present	360	(89.8	38	(77.6)	
	Omitted	41	(10.2)	11	(22.4)	0.0115*
hand/slf	Present	281	(70.1)	30	(61.2)	
	Omitted	120	(29.9)	19	(38.8)	0.2056
hand/mom	Present	269	(67.1)	27	(55.1)	
	Omitted	132	(32.9)	22	(44.9)	0.0952
hand/dad	Present	274	(68.3)	19	(38.8)	
	Omitted	127	(31.7)	30	(61.2)	0.0000*

Table 43--Continued.

Variable	Present/ Omitted	General n = 401		Offender n = 49		df=1 p	sig
feet/slf	Present	304	(75.8)	33	(67.3)		
	Omitted	97	(24.2)	16	(32.7)	0.1972	
feet/mom	Present	282	(70.3)	27	(55.1)		
	Omitted	119	(29.7)	22	(44.9)	0.0301	*
feet/dad	Present	278	(69.3)	27	(55.1)		
	Omitted	123	(30.7)	22	(44.9)	0.0443	*
dad/pres	Present	375	(93.5)	41	(83.7)		
	Omitted	26	(6.5)	8	(16.3)	0.0287	*
mom/pres	Present	391	(97.5)	44	(89.8)		
	Omitted	10	(2.5)	5	(10.2)	0.0157	*
lgnecksf	Present	86	(21.4)	13	(26.5)		
	Omitted	315	(78.6)	36	(73.5)	0.4174	
lgneckmo	Present	72	(18.0)	15	(30.6)		
	Omitted	329	(82.0)	34	(69.4)	0.0342	*
lgneckda	Present	66	(16.5)	8	(16.3)		
	Omitted	335	(83.5)	41	(83.7)	0.9812	
bighndsf	Present	39	(9.7)	6	(12.2)		
	Omitted	362	(90.3)	43	(84.8)	0.7621	
bighndmo	Present	36	(9.0)	4	(8.2)		
	Omitted	365	(91.0)	45	(91.8)	1.0000	
bighndda	Present	52	(13.0)	8	(6.1)		
	Omitted	349	(87.0)	46	(93.9)	0.1673	
bigftslf	Present	16	(4.0)	2	(4.1)		
	Omitted	385	(96.0)	47	(95.9)	1.0000	
bigftmom	Present	15	(3.7)	1	(2.0)		
	Omitted	386	(96.3)	48	(98.0)	0.8431	
bigftdad	Present	25	(6.2)	4	(8.2)		
	Omitted	376	(93.8)	45	(91.8)	0.8330	
-asymlmb	Present	219	(54.6)	25	(51.0)		
	Omitted	182	(45.4)	24	(49.0)	0.6337	

Table 43--Continued.

Variable	Present/ Omitted	General n = 401		Offender n = 49		df=1 p	sig
-bodyint	Present	141	(35.2)	24	(49.0)		
	Omitted	260	(64.8)	25	(51.0)	0.0581	
nurt/dad	Present	105	(26.2)	7	(14.3)		
	Omitted	296	(73.8)	42	(85.7)	0.0690	
nurt/mom	Present	153	(38.2)	11	(22.4)		
	Omitted	248	(61.8)	38	(77.6)	0.0311	*
dist/dad	Present	91	(22.7)	19	(38.8)		
	Omitted	310	(77.3)	30	(61.2)	0.0134	*
dist/mom	Present	74	(18.5)	23	(46.9)		
	Omitted	327	(81.5)	26	(53.1)	0.0000	*
genitals	Present	0	(0.0)	1	(0.2)		
	Omitted	401	(100.0)	48	(99.8)	0.2888	
2ndsexch	Present	24	(6.0)	3	(6.1)		
	Omitted	377	(94.0)	46	(93.9)	1.0000	
shading	Present	36	(9.0)	6	(12.2)		
	Omitted	365	(91.0)	43	(87.8)	0.6298	
fig/slan	Present	41	(10.2)	9	(18.4)		
	Omitted	360	(89.8)	40	(81.6)	0.0869	
LLIF	Present	304	(75.8)	9	(18.4)		
	Omitted	97	(42.2)	40	(81.6)	0.0000	*
dangerob	Present	15	(3.7)	6	(12.2)		
	Omitted	386	(96.3)	43	(87.8)	0.0211	*
dangerac	Present	11	(2.7)	5	(10.2)		
	Omitted	390	(97.3)	44	(89.8)	0.0242	*
teeth	Present	23	(5.7)	6	(12.2)		
	Omitted	378	(94.3)	43	(87.8)	0.1489	

* $p < 0.05$.

TABLE 44

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS, BARRIERS, ALL SUBJECTS: GENERAL VS.OFFENDER

Variable	General	Offender	df=4 p sig
self/mo	n = 387	n = 44	
none	185 (47.8)	20 (45.5)	
2/1pers	110 (28.4)	11 (25.0)	
over2per	17 (4.4)	3 (6.8)	
hphycon	14 (3.6)	0 (0.0)	
inviscon	61 (15.8)	10 (22.7)	0.4829
self/dad	n = 373	n = 41	
none	154 (41.3)	20 (48.8)	
2/1pers	118 (31.6)	9 (22.0)	
over2per	17 (4.6)	3 (7.3)	
hphycon	16 (4.3)	0 (0.0)	
inviscon	68 (18.2)	9 (22.0)	0.3747
mom/dad	n = 372	n = 37	
none	244 (65.6)	22 (59.9)	
2/1pers	47 (12.6)	2 (5.4)	
over2per	6 (1.6)	2 (5.4)	
hphycon	15 (4.0)	0 (0.0)	
inviscon	60 (16.0)	11 (29.7)	0.0559

TABLE 45

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
BOTH PARENTS IN HOME: GENERAL VS. OFFENDER

Variable	Present/ Omitted	General n = 373		Offender n = 43		df=1 p sig
face/slf	Present	245	(65.7)	31	(72.1)	
	Omitted	128	(34.3)	12	(27.9)	0.3997
face/mom	Present	259	(69.4)	29	(67.4)	
	Omitted	114	(30.6)	14	(32.6)	0.7884
face/dad	Present	269	(72.1)	26	(60.5)	
	Omitted	104	(27.9)	17	(39.5)	0.1111
body/slf	Present	349	(93.6)	40	(93.0)	
	Omitted	24	(6.4)	3	(7.0)	1.0000
body/mom	Present	352	(94.4)	38	(88.4)	
	Omitted	21	(5.6)	5	(11.6)	0.2279
body/dad	Present	347	(93.0)	37	(86.0)	
	Omitted	26	(7.0)	6	(14.0)	0.1852
arms/slf	Present	348	(93.3)	38	(88.4)	
	Omitted	25	(6.7)	5	(11.6)	0.3837
arms/mom	Present	348	(93.3)	37	(86.0)	
	Omitted	25	(6.7)	6	(14.0)	0.1592
arms/dad	Present	345	(92.5)	37	(86.0)	
	Omitted	28	(7.5)	6	(14.0)	0.2431
hand/slf	Present	261	(70.0)	25	(58.1)	
	Omitted	112	(30.0)	18	(41.9)	0.1129
hand/mom	Present	255	(68.4)	24	(55.8)	
	Omitted	118	(31.6)	19	(44.2)	0.0973
hand/dad	Present	262	(70.2)	19	(44.2)	
	Omitted	111	(29.8)	24	(55.8)	0.0005*
feet/slf	Present	285	(76.4)	27	(62.8)	
	Omitted	88	(23.6)	16	(37.2)	0.0509
feet/mom	Present	265	(71.0)	24	(55.8)	
	Omitted	108	(29.0)	19	(44.2)	0.0400*

Table 45--Continued.

Variable	Present/ Omitted	General n = 373		Offender n = 43		df=1 p sig
feet/dad	Present	264	(70.8)	25	(58.1)	
	Omitted	109	(29.2)	18	(41.9)	0.0884
dad/pres	Present	366	(98.1)	39	(90.7)	
	Omitted	7	(1.9)	4	(9.3)	0.0177
mom/pres	Present	368	(98.7)	40	(93.0)	
	Omitted	5	(1.3)	3	(7.0)	0.0498*
lgnecksf	Present	80	(21.4)	11	(25.6)	
	Omitted	293	(78.6)	32	(74.4)	0.5347
lgneckmo	Present	66	(17.7)	13	(30.2)	
	Omitted	307	(82.3)	30	(69.8)	0.0472*
lgneckda	Present	57	(15.3)	8	(18.6)	
	Omitted	316	(84.7)	35	(81.4)	0.5698
bighndsf	Present	36	(9.7)	5	(11.6)	
	Omitted	337	(90.3)	38	(88.4)	0.8874
bighndmo	Present	31	(8.3)	3	(7.0)	
	Omitted	342	(91.7)	40	(93.0)	0.9932
bighndda	Present	43	(11.5)	3	(7.0)	
	Omitted	330	(88.5)	40	(93.0)	0.5193
bigftslf	Present	15	(4.0)	2	(4.7)	
	Omitted	358	(96.0)	41	(95.3)	1.0000
bigftmom	Present	12	(3.2)	1	(2.3)	
	Omitted	361	(96.8)	42	(97.7)	1.0000
bigftdad	Present	16	(4.3)	4	(9.3)	
	Omitted	357	(95.7)	39	(90.7)	0.2808
-asymlmb	Present	207	(55.5)	21	(48.8)	
	Omitted	166	(44.5)	22	(51.2)	0.4061
-bodyint	Present	131	(35.1)	21	(48.8)	
	Omitted	242	(64.9)	22	(51.2)	0.0769
nurt/dad	Present	100	(26.8)	7	(16.3)	
	Omitted	273	(73.2)	36	(83.7)	0.1347

Table 45--Continued.

Variable	Present/ Omitted	General n = 373		Offender n = 43		df=1 p	sig
nurt/mom	Present	142	(38.1)	11	(25.6)		
	Omitted	231	(61.9)	32	(74.4)	0.1078	
dist/dad	Present	77	(20.6)	17	(39.9)		
	Omitted	296	(79.4)	26	(60.5)	0.0050*	
dist/mom	Present	70	(18.8)	21	(48.8)		
	Omitted	303	(81.2)	22	(51.2)	0.0000*	
genitals	Present	0	(0.0)	1	(2.3)		
	Omitted	373	(100.0)	42	(97.7)	0.1921	
2ndsexch	Present	23	(6.2)	3	(7.0)		
	Omitted	350	(93.8)	40	(93.0)	1.0000	
shading	Present	32	(8.6)	6	(14.0)		
	Omitted	341	(91.4)	37	(86.0)	0.3795	
fig/slan	Present	40	(10.7)	9	(20.9)		
	Omitted	333	(89.3)	34	(79.1)	0.0493*	
LLIF	Present	289	(77.5)	9	(20.9)		
	Omitted	84	(22.5)	34	(79.1)	0.0000*	
dangerob	Present	14	(3.8)	6	(14.0)		
	Omitted	359	(96.2)	37	(86.0)	0.0098*	
dngerac	Present	10	(2.7)	5	(11.6)		
	Omitted	363	(97.3)	38	(88.4)	0.0108	
teeth	Present	23	(6.2)	5	(11.6)		
	Omitted	350	(93.8)	38	(88.4)	0.3020	

* $p < 0.05$.

TABLE 46

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
BOTH PARENTS, BARRIERS: GENERAL VS. OFFENDER

Variable	General	Offender	df=4 p sig
self/mom	n = 363	n = 40	
none	171 (47.1)	18 (45.0)	
2/1pers	104 (28.7)	10 (25.0)	
over2per	17 (4.7)	3 (7.5)	
hphycon	12 (3.3)	0 (0.0)	
inviscon	59 (16.3)	9 (22.5)	0.5687
self/dad	n = 363	n = 39	
none	152 (41.9)	18 (46.2)	
2/1pers	115 (31.7)	9 (23.1)	
over2per	17 (4.7)	3 (7.7)	
hypycon	14 (3.9)	0 (0.0)	
inviscon	65 (17.9)	9 (23.1)	0.4548
mom/dad	n = 366	n = 37	
none	243 (66.4)	22 (59.5)	
2/1pers	46 (12.6)	2 (5.4)	
over2per	5 (1.4)	2 (5.4)	
hypycon	13 (3.6)	0 (0.0)	
inviscon	59 (16.1)	11 (29.7	0.0449*

* $p < 0.05$.

TABLE 47

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
FATHER FIGURE PRESENT: GENERAL VS. OFFENDER

Variable	Present/ Omitted	General n = 376		Offender n = 45		df=1 p sig
face/slf	Present	248	(66.0)	32	(71.1)	
	Omitted	128	(34.0)	13	(28.9)	0.4888
face/mom	Present	260	(69.1)	29	(64.4)	
	Omitted	116	(30.9)	16	(35.6)	0.5203
face/dad	Present	271	(72.1)	28	(62.2)	
	Omitted	105	(27.9)	17	(37.8)	0.1686
body/slf	Present	352	(93.6)	42	(93.3)	
	Omitted	24	(6.4)	3	(6.7)	1.0000
body/mom	Present	353	(93.3)	38	(84.4)	
	Omitted	23	(6.1)	7	(15.6)	0.0435*
body/dad	Present	350	(93.1)	39	(86.7)	
	Omitted	26	(6.9)	6	(13.3)	0.2158
arms/slf	Present	351	(93.4)	40	(88.9)	
	Omitted	25	(6.6)	5	(11.1)	0.4278
arms/mom	Present	349	(92.8)	37	(82.2)	
	Omitted	27	(7.2)	8	(17.8)	0.0317*
arms/dad	Present	348	(92.6)	38	(84.4)	
	Omitted	28	(7.4)	7	(15.6)	0.1150
hand/slf	Present	263	(69.9)	26	(57.8)	
	Omitted	113	(30.1)	19	(42.2)	0.0963
hand/mom	Present	256	(68.1)	24	(53.3)	
	Omitted	120	(31.9)	21	(46.7)	0.0475*
hand/dad	Present	264	(70.2)	19	(42.2)	
	Omitted	112	(29.8)	26	(57.8)	0.0002*
feet/slf	Present	288	(76.6)	29	(35.6)	
	Omitted	88	(23.3)	16	(35.6)	0.0741
feet/mom	Present	266	(70.7)	24	(53.3)	
	Omitted	110	(29.3)	21	(46.7)	0.0171*

Table 47--Continued.

Variable	Present/ Omitted	General n = 376		Offender n = 45		df=1 p	sig
feet/dad	Present	266	(70.7)	27	(60.0)		
	Omitted	110	(29.3)	18	(40.0)	0.1387	
dad/pres	Present	369	(98.1)	41	(91.1)		
	Omitted	7	(1.9)	4	(8.9)	0.0215	*
mom/pres	Present	368	(97.9)	40	(88.9)		
	Omitted	8	(2.1)	5	(11.1)	0.0046	*
lgnecksf	Present	80	(21.3)	11	(24.4)		
	Omitted	296	(78.7)	34	(75.6)	0.6256	
lgneckmo	Present	68	(18.1)	13	(28.9)		
	Omitted	308	(81.9)	32	(71.1)	0.0823	
lgneckda	Present	57	(15.2)	8	(17.8)		
	Omitted	319	(84.8)	37	(82.2)	0.6460	
bighndsf	Present	36	(9.6)	5	(11.1)		
	Omitted	340	(90.4)	40	(88.9)	0.9501	
bighndmo	Present	33	(8.8)	3	(6.7)		
	Omitted	343	(91.2)	42	(93.3)	0.8444	
bighndda	Present	43	(11.4)	3	(6.7)		
	Omitted	333	(88.6)	42	(93.3)	0.4737	
bigftslf	Present	15	(4.0)	2	(4.4)		
	Omitted	361	(96.0)	43	(95.6)	1.0000	
bigftmom	Present	14	(3.7)	1	(2.2)		
	Omitted	362	(96.3)	44	(97.8)	0.9299	
bigftdad	Present	16	(4.3)	4	(8.9)		
	Omitted	360	(95.7)	41	(91.1)	0.3124	
-asymlmb	Present	209	(55.6)	23	(51.1)		
	Omitted	167	(44.4)	22	(48.9)	0.5685	
-bodyint	Present	133	(35.4)	22	(48.9)		
	Omitted	243	(64.6)	23	(51.1)	0.0756	
nurt/dad	Present	100	(26.6)	7	(15.6)		
	Omitted	276	(73.4)	38	(84.4)	0.1079	

Table 47--*Continued*.

Variable	Present/ Omitted	General n = 376	Offender n = 45	df=1 p sig
nurt/mom	Present	142 (37.8)	11 (24.4)	
	Omitted	234 (62.2)	34 (75.6)	0.0791
dist/dad	Present	78 (20.7)	17 (37.8)	
	Omitted	298 (79.3)	28 (62.2)	0.0098*
dist/mom	Present	70 (18.6)	22 (48.9)	
	Omitted	306 (81.4)	23 (51.1)	0.0000*
genitals	Present	0 (0.0)	1 (2.2)	
	Omitted	376 (100.0)	44 (97.8)	0.2027
2ndsexch	Present	23 (6.1)	3 (6.7)	
	Omitted	353 (93.9)	42 (93.3)	1.0000
shading	Present	33 (8.8)	6 (13.3)	
	Omitted	343 (91.2)	39 (86.7)	0.4688
fig/slan	Present	40 (10.6)	9 (20.0)	
	Omitted	336 (89.4)	36 (80.0)	0.0642
LLIF	Present	290 (77.1)	9 (20.0)	
	Omitted	86 (22.9)	36 (80.0)	0.0000*
dangerob	Present	14 (3.7)	6 (13.3)	
	Omitted	362 (96.3)	39 (86.7)	0.0127*
dangerac	Present	10 (2.7)	5 (11.1)	
	Omitted	366 (97.3)	40 (88.9)	0.0137*
teeth	Present	23 (6.1)	5 (11.1)	
	Omitted	353 (93.9)	40 (88.9)	0.3400

* $p < 0.05$.

TABLE 48

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
FATHER PRESENT, BARRIERS: GENERAL VS. OFFENDER

Variable	General	Offender	df=4 p sig
self/mom	n = 363	n = 40	
none	171 (47.1)	18 (45.0)	
2/1pers	104 (28.7)	10 (25.0)	
over2per	17 (4.7)	3 (7.5)	
hphycon	12 (3.3)	0 (0.0)	
inviscon	59 (16.3)	9 (22.5)	0.5687
self/dad	n = 363	n = 39	
none	152 (41.9)	18 (46.2)	
2/1pers	115 (31.7)	9 (23.1)	
over2per	17 (4.7)	3 (7.7)	
hypycon	14 (3.9)	0 (0.0)	
inviscon	65 (17.9)	9 (23.1)	0.4548
mom/dad	n = 366	n = 37	
none	243 (66.4)	22 (59.5)	
2/1pers	46 (12.6)	2 (5.4)	
over2per	5 (1.4)	2 (5.4)	
hypycon	13 (3.6)	0 (0.0)	
inviscon	59 (16.1)	11 (29.7	0.0449*

* p < 0.05.

TABLE 49

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
MOTHER FIGURE PRESENT: GENERAL VS. OFFENDER

Variable	Present/ Omitted	General n = 376		Offender n = 45		df=1 p sig
face/slf	Present	262	(65.8)	35	(75.4)	
	Omitted	136	(34.2)	12	(25.5)	0.2345
face/mom	Present	276	(69.3)	33	(70.2)	
	Omitted	122	(30.7)	14	(29.8)	0.9030
face/dad	Present	280	(70.4)	26	(55.3)	
	Omitted	118	(29.6)	21	(44.7)	0.0355*
body/slf	Present	373	(93.7)	43	(91.5)	
	Omitted	25	(6.3)	4	(8.5)	0.7848
body/mom	Present	375	(94.2)	41	(87.2)	
	Omitted	23	(5.8)	6	(12.8)	0.1278
body/dad	Present	359	(90.2)	37	(78.7)	
	Omitted	39	(9.8)	10	(21.3)	0.0174*
arms/slf	Present	372	(93.5)	42	(89.4)	
	Omitted	26	(6.5)	5	(10.6)	0.2957
arms/mom	Present	370	(93.0)	41	(87.2)	
	Omitted	28	(7.0)	6	(12.8)	0.2677
arms/dad	Present	357	(89.7)	37	(78.7)	
	Omitted	41	(10.3)	10	(21.3)	0.0255*
hand/slf	Present	279	(70.1)	29	(61.7)	
	Omitted	119	(29.9)	18	(38.3)	0.2382
hand/mom	Present	268	(67.3)	27	(57.4)	
	Omitted	130	(32.7)	20	(42.6)	0.1750
hand/dad	Present	272	(68.3)	19	(40.4)	
	Omitted	126	(31.7)	28	(59.6)	0.0001*
feet/slf	Present	301	(75.6)	31	(66.0)	
	Omitted	97	(24.4)	16	(34.0)	0.1497
feet/mom	Present	281	(70.6)	27	(57.4)	
	Omitted	117	(29.4)	20	(42.6)	0.0646

Table 49--Continued.

Variable	Present/ Omitted	General n = 376		Offender n = 45		df=1 p sig
feet/dad	Present	276	(69.3)	25	(53.2)	
	Omitted	122	(30.7)	22	(46.8)	0.0252*
dad/pres	Present	272	(93.5)	39	(83.0)	
	Omitted	26	(6.5)	8	(17.0)	0.0232*
mom/pres	Present	391	(98.2)	44	(93.6)	
	Omitted	7	(1.8)	3	(6.4)	0.1330
lgnecksf	Present	86	(21.6)	13	(27.7)	
	Omitted	312	(78.4)	34	(72.3)	0.3455
lgneckmo	Present	70	(17.6)	15	(31.9)	
	Omitted	328	(82.4)	32	(68.1)	0.0181*
lgneckda	Present	66	(16.6)	8	(17.0)	
	Omitted	332	(83.4)	39	(83.0)	0.9392
bighndsf	Present	39	(9.8)	6	(12.8)	
	Omitted	359	(90.2)	41	(87.2)	0.7023
bighndmo	Present	34	(8.5)	4	(8.5)	
	Omitted	364	(91.5)	43	(91.5)	1.0000
bighndda	Present	52	(13.1)	3	(6.4)	
	Omitted	346	(86.9)	44	(93.6)	0.1880
bigftslf	Present	16	(4.0)	2	(4.3)	
	Omitted	382	(96.0)	45	(95.7)	1.0000
bigftmom	Present	13	(3.3)	1	(2.1)	
	Omitted	385	(96.7)	46	(97.9)	1.0000
bigftdad	Present	25	(6.3)	4	(8.5)	
	Omitted	373	(93.7)	53	(91.5)	0.7848
-asymlmb	Present	217	(54.5)	23	(48.9)	
	Omitted	181	(45.5)	24	(51.1)	0.4674
-bodyint	Present	139	(34.9)	23	(48.9)	
	Omitted	259	(65.1)	24	(51.1)	0.0590
nurt/dad	Present	105	(26.4)	7	(14.9)	
	Omitted	293	(73.6)	40	(85.1)	0.0861

Table 49--Continued.

Variable	Present/ Omitted	General n = 376	Offender n = 45	df=1 p sig
nurt/mom	Present	153 (38.4)	11 (23.4)	
	Omitted	245 (61.6)	36 (76.6)	0.0433*
dist/dad	Present	90 (22.6)	19 (40.4)	
	Omitted	308 (77.4)	28 (59.6)	0.0072*
dist/mom	Present	74 (18.6)	22 (46.8)	
	Omitted	324 (81.4)	25 (53.2)	0.0000*
genitals	Present	0 (0.0)	1 (2.1)	
	Omitted	398 (100.0)	46 (97.9)	0.1989
2ndsexch	Present	24 (6.0)	3 (6.4)	
	Omitted	374 (94.0)	44 (93.6)	1.0000
shading	Present	35 (8.8)	6 (12.8)	
	Omitted	363 (91.2)	41 (87.2)	0.5328
fig/slan	Present	41 (10.3)	9 (19.1)	
	Omitted	357 (89.7)	38 (80.9)	0.0693
LLIF	Present	303 (76.1)	9 (19.1)	
	Omitted	95 (23.9)	38 (80.9)	0.0000*
dangerob	Present	15 (3.8)	6 (12.8)	
	Omitted	383 (96.2)	41 (87.2)	0.0170*
Dangerac	Present	11 (2.8)	5 (10.6)	
	Omitted	387 (97.2)	42 (89.4)	0.0199*
teeth	Present	23 (5.8)	6 (12.8)	
	Omitted	375 (94.2)	41 (87.2)	0.1278

* $p < 0.05$.

TABLE 50

KFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS,
MOTHER PRESENT, BARRIERS: GENERAL VS. OFFENDER

Variable	General	Offender	df=4 p sig
self/mom	n = 387	n = 44	
none	185 (47.8)	20 (45.5)	
2/1pers	110 (28.4)	11 (25.0)	
over2per	17 (4.4)	3 (6.8)	
hphycon	14 (3.6)	0 (0.0)	
inviscon	61 (15.8)	10 (22.7)	0.4829
self/dad	n = 370	n = 39	
none	154 (41.6)	18 (46.2)	
2/1pers	118 (31.6)	9 (23.1)	
over2per	17 (4.6)	3 (7.7)	
hphycon	16 (4.3)	0 (0.0)	
inviscon	66 (17.8)	9 (23.1)	0.4176
mom/dad	n = 372	n = 37	
none	244 (65.6)	22 (59.5)	
2/1pers	47 (12.6)	2 (5.4)	
over2per	6 (1.6)	2 (5.4)	
hphycon	15 (4.0)	0 (0.0)	
inviscon	60 (16.1)	11 (29.7)	0.0559

APPENDIX B

HFD CONTINGENCY TABLE; CHI-SQUARE ANALYSES

TABLE 51

HFD CONTINGENCY TABLE, CHI-SQUARE ANALYSIS:
GENERAL VS. OFFENDER

Variable	Present/ Omitted	General n = 401	Offender n = 49	df=1 p sig
Eyes	Present	390 (97.3)	46 (93.9)	
	Omitted	11 (2.7)	3 (6.1)	0.3951
Mouth	Present	385 (96.0)	46 (93.9)	
	Omitted	16 (4.0)	3 (6.1)	0.7456
Arms	Present	391 (97.5)	47 (95.9)	
	Omitted	10 (2.5)	2 (4.1)	0.8559
Feet	Present	367 (91.5)	46 (93.9)	
	Omitted	34 (8.5)	3 (6.1)	0.7708
Nose	Present	351 (87.5)	45 (91.8)	
	Omitted	50 (12.5)	4 (8.2)	0.5204
Body	Present	391 (97.5)	47 (95.9)	
	Omitted	10 (2.5)	2 (4.1)	0.8559
Legs	Present	385 (96.0)	47 (95.9)	
	Omitted	16 (4.0)	2 (4.1)	1.0000
Neck	Present	309 (77.1)	39 (79.6)	
	Omitted	92 (22.9)	10 (20.4)	0.6891
Poor integration	Present	108 (26.9)	14 (28.6)	
	Omitted	293 (73.1)	35 (71.4)	0.8075
Gross asymmetry	Present	176 (43.6)	25 (51.0)	
	Omitted	226 (56.4)	24 (49.0)	0.3264
Slanting figure	Present	25 (6.2)	2 (4.1)	
	Omitted	376 (93.8)	47 (95.9)	0.7792
Transparency	Present	8 (2.0)	1 (2.0)	
	Omitted	393 (98.0)	48 (98.0)	1.0000
Shading/face	Present	54 (13.5)	2 (4.1)	
	Omitted	347 (86.5)	47 (95.9)	0.0603

Table 51--Continued.

Variable	Present/ Omitted	General n = 401	Offender n = 49	df=1 p sig
Shading hand/neck	Present	21 (5.2)	0 (0.0)	
	Omitted	380 (94.8)	49(100.0)	0.1999
Shading body/limb	Present	27 (6.7)	0 (0.0)	
	Omitted	374 (93.3)	49(100.0)	0.1200
Legs together	Present	39 (9.7)	5 (10.2)	
	Omitted	362 (90.3)	44 (89.8)	1.0000
Genitals	Present	1 (0.2)	1 (2.0)	
	Omitted	400 (99.8)	48 (98.0)	0.5208
2nd sex characteristics	Present	44 (11.0)	3 (6.1)	
	Omitted	357 (89.0)	46 (93.9)	0.2947
Blackening/ Shading	Present	46 (11.5)	1 (2.0)	
	Omitted	355 (88.5)	48 (98.0)	0.0416*
Teeth	Present	63 (15.7)	18 (36.7)	
	Omitted	338 (84.3)	31 (63.3)	0.0003*
Dangerous objects	Present	23 (5.7)	7 (14.3)	
	Omitted	378 (94.3)	42 (85.7)	0.0498*
Dangerous activities	Present	11 (2.7)	1 (2.0)	
	Omitted	390 (97.3)	48 (98.0)	1.0000
Tiny head	Present	17 (4.2)	3 (6.1)	
	Omitted	384 (95.8)	46 (93.9)	0.8130
Long neck	Present	56 (14.0)	12 (24.5)	
	Omitted	345 (86.0)	37 (75.5)	0.0522
Long arms	Present	44 (11.0)	4 (8.2)	
	Omitted	357 (89.0)	45 (91.8)	0.5476
Large hands	Present	31 (7.7)	11 (22.4)	
	Omitted	370 (92.3)	38 (77.6)	0.0020*
Large feet	Present	24 (6.0)	9 (18.4)	
	Omitted	377 (94.0)	40 (81.6)	0.0044*
Short arms	Present	46 (11.5)	15 (30.6)	
	Omitted	355 (88.5)	34 (69.4)	0.0002*

Table 51-Continued.

Variable	Present/ Omitted	General n = 401	Offender n = 49	df=1 p sig
Arms w/o hand/finger	Present	57 (14.2)	10 (20.4)	
	Omitted	344 (85.8)	39 (79.6)	0.2503
Tiny figure	Present	27 (6.7)	0 (0.0)	
	Omitted	374 (93.3)	49(100.0)	0.1200
Big figure	Present	44 (11.0)	5 (10.2)	
	Omitted	357 (89.0)	44 (89.8)	0.8705

* p < 0.05.

APPENDIX C

KFD DISCRIMINANT ANALYSIS TABLES

TABLE 52

KFD DISCRIMINANT ANALYSIS:
ALL SUBJECTS

Statistic	All subject	Both parent	Father pres	Mother pres
df	45	43	44	44
Eigenval	.4715	.4533	.4858	.4438
Lambda	.6796	.6881	.6730	.6926
Chi-sq.	164.367	146.744	156.195	154.615
p	< .00005	< .00005	< .00005	< .00005
Variable	Standardized discriminant loadings			
face/slf	-.18640	-.19285	-.14566	-.23002
face/mom	.08674	.12969	.12496	.08940
face/dad	.08563	.00285	-.03577	.12557
body/slf	-.07936	-.13812	-.13495	-.07591
body/mom	-.06014	-.12191	-.08803	-.09549
body/dad	-.00728	.02958	-.03139	.05938
arms/slf	.01028	.08781	.05718	.03867
arms/mom	-.01838	.03845	.03831	-.01632
arms/dad	.04351	-.09872	-.00955	-.05704
hand/slf	-.13753	-.11654	-.12770	-.12767
hand/mom	-.07295	-.05905	-.06360	-.07383
hand/dad	.42415	.40869	.41229	.42287
feet/slf	.00754	.04305	.03340	.01342
feet/mom	-.06296	-.03706	-.02857	-.07151
feet/dad	.03661	.01831	.00490	.05254
dad/pres	.15978	.19770	.18858	.16611

Table 52--Continued.

Variable	All subject	Both parent	Father pres	Mother pres
mom/pres	.05123	.08999	.12481	.03872
lgnecksf	-.01368	-.08907	-.08971	-.01537
lgneckmo	.29762	.33155	.29719	.33029
lgneckda	-.20743	-.16106	-.14155	-.22423
bighndsf	.19573	.18804	.18699	.19451
bighndmo	-.07437	-.08299	-.11424	-.04712
bighndda	-.10192	-.08450	-.06580	-.11872
bigftslf	-.05894	-.06281	-.05140	-.07542
bigftmom	-.27046	-.20792	-.27277	-.21152
bigftdad	.27542	.23666	.24351	.27321
-asymlmb	-.16361	-.21428	-.20079	-.18074
-bodyint	.11903	.13029	.13374	.11811
nurt/dad	-.04691	-.01535	-.01899	-.04481
nurt/mom	-.08969	-.14170	-.13358	-.09586
dist/dad	-.53697	-.64914	-.66627	-.51212
dist/mom	.88083	.98280	.99526	.85949
genitals	.30993	.32985	.31727	.32068
2ndsexch	.03493	.07103	.06899	.03851
shading	.04559	.10241	.07143	.07387
fig/slan	.16005	.16524	.15759	.16732
LLIF	.67611	.66661	.65751	.68348
dangerob	-.10918	-.10765	-.11577	-.10040
dangerac	.27218	.28026	.27896	.27223

Table 52--Continued.

Variable	All subject	Both parent	Father pres	Mother pres
teeth	.14512	.10952	.10313	.15341
barsf/mo	-.1469	-.29638	-.27026	-.16759
barsf/da	-.1818	-.01758	-.09582	-.10235
barmo/da	.0462	.08317	.12086	.00533

APPENDIX D

HFD DISCRIMINANT ANALYSIS TABLES

TABLE 53

HFD DISCRIMINANT ANALYSIS

df = 32	Eigen .2120	Lambda .8251	Chi-square 83.053
eyes	.14907	genitals	.26597
mouth	.25269	2ndary sex characteristics	-.07598
arms	-.04380	blackening/ shading	.03820
feet	-.12151	teeth	.51009
nose	-.20101	dangerous objects	.30594
body	.20259	dangerous activities	-.25000
legs	.08746	tiny head	-.09198
neck	-.13603	long neck	.14133
poor integration	-.02886	long arms	-.14578
gross assymmetry	.03134	large hands	.42919
slanting figure	-.03914	large feet	.28502
transparency	.02169	short arms	.39140
shading/face	-.13450	arms w/o hand/finger	.31062
shading hand/neck	-.07220	tiny figure	-.13786
shading body/limb	-.21747	big figure	-.13456
legs together	-.06873		

APPENDIX E

KFD and HFD PERCENTAGE RESPONSES

TABLE 52

KFD PERCENTAGE RESPONSES

Variables		n=450 Total Sample Gen Vs Offend		n=401 General 12- n=252	n=401 General 13+ n=149	n=49 Offender 12- n=16	n=49 Offender 13+ n=33	n=278 Gen Vs Offend 12- n=252	n=278 Gen Vs Offend 12- n=16	n=172 Gen Vs Offend 13+ n=138	n=172 Gen Vs Offend 13+ n=34
face/dad	Present	70.3	57.1	65.5	77.5	60.0	55.9	66.5	60.0	77.5	55.9
	Omitted	29.7	42.9*	33.5	22.5*	40.0	44.1	33.3	40.0	22.5	44.1
body/mom	Present	93.8	83.7	95.1	91.3	73.3	88.2	95.1	73.3	91.3	82.2
	Omitted	6.2	16.3*	4.9	8.7	26.7	11.8	4.9	26.7	8.7	11.8
body/dad	Present	90.3	79.6	91.3	88.4	73.3	82.4	93.1	73.3	88.4	82.4
	Omitted	9.7	20.7*	8.7	11.6	26.7	17.6	8.7	26.7	11.6	17.6
arms/slf	Present	93.5	89.8	95.8	89.1	100.0	85.3	95.8	100.0	89.1	85.3
	Omitted	6.5	10.2	4.2	10.9*	0.0	14.7	4.2	0.0	10.9	14.7
arms/dad	Present	89.8	77.6	90.5	88.4	66.7	82.4	90.5	66.7	88.4	82.4
	Omitted	10.2	22.4*	9.5	11.6	33.3	17.6	9.5	33.3	11.6	17.6
hand/mom	Present	67.1	55.1	65.4	70.3	66.7	50.0	65.4	66.7	70.3	50.0
	Omitted	32.9	44.9	34.6	29.7	33.3	50.1	34.6	33.3	29.7	50.0

Table 52--Continued.

Variables		n=450 Total Sample Gen Vs Offen		n=401 General		n=49 Offender		n=278 Gen Vs Offend		n=172 Gen Vs Offend	
				12- n=252	13+ n=149	12- n=16	13+ n=33	12- n=252	n=16	13+ n=138	n=34
hand/dad	Present	68.3	38.8	68.4	68.1	33.3	41.2	68.4	33.3	68.1	41.2
	Omitted	31.7	61.2*	31.6	31.9	66.7	58.8	31.6	66.7	31.9	58.8
feet/mom	Present	70.3	55.1	70.3	70.3	40.0	61.8	70.3	40.0	70.3	61.8
	Omitted	29.7	44.9*	29.7	29.7	60.0	38.2	29.7	60.0	29.7	38.2
feet/dad	Present	69.3	55.1	69.6	68.8	40.0	61.8	69.6	40.0	68.8	61.8
	Omitted	30.7	44.9*	30.4	31.2	60.0	38.2	30.4	60.0	31.2	38.2
dad/pres	Present	93.5	83.7	93.2	94.2	73.3	88.2	93.2	73.3	94.2	88.2
	Omitted	6.5	16.3*	6.8	5.8	26.7	11.8	6.8	26.7	5.8	11.8
mom/pres	Present	97.5	89.8	97.3	97.8	93.3	88.2	97.3	93.3	97.8	88.2
	Omitted	2.5	10.2*	2.7	2.2	6.7	11.8	2.7	6.7	2.2	11.8
lgneckmo	Present	18.0	30.6	82.5	81.2	73.3	67.6	82.5	73.3	81.2	67.6
	Omitted	82.0	69.4	17.5	18.2	26.7	32.4	17.5	26.7	18.8	32.4
bigftmom	Present	3.7	2.0	94.7	99.3	100.0	97.1	94.7	100.0	99.3	97.1
	Omitted	96.3	98.0	5.3	0.7*	0.0	2.9	5.3	0.0	0.7	2.9

Table 52--Continued.

Variables		n=450 Total Sample Gen Vs Offen		n=401 General 12- n=252	13+ n=149	n=49 Offender 12- n=16	13+ n=33	n=278 Gen Vs Offend 12- n=252	n=16	n=172 Gen Vs Offend 13+ n=138	n=34
-asymlmb	Present	54.6	51.0	40.3	76.1	33.3	55.9	40.3	33.3	55.1	55.9
	Omitted	45.4	49.0*	59.7	23.9*	66.7	44.1	59.7	66.7	44.9	44.1
-bodyint	Present	35.2	49.0	58.9	76.1	33.3	58.8	58.9	33.3	76.1	58.8
	Omitted	64.8	51.0	41.1	23.9*	66.7	41.2	41.1	66.7	23.9	41.2
nurt/mom	Present	38.2	22.4	36.9	40.6	13.3	26.5	36.9	13.7	40.6	26.5
	Omitted	61.8	77.6*	63.1	59.4	86.7	73.5	63.1	86.7	59.4	73.5
dist/dad	Present	22.7	38.8	74.5	82.6	60.0	61.8	74.5	60.0	82.6	61.8
	Omitted	77.3	61.2*	25.5	17.4	40.0	38.2	25.5	40.0	17.4	38.2
dist/mom	Present	18.5	46.9	77.9	88.4	53.3	52.9	77.9	53.3	88.4	52.9
	Omitted	81.5	53.1*	22.1	11.6*	46.7	47.1	22.1	46.7	11.6	47.1
LLIF	Present	75.8	18.4	78.3	71.0	0.0	26.5	78.3	0.0	71.0	26.5
	Omitted	42.2	81.6*	21.7	29.0	100.0	73.5	21.7	100.0	29.0	73.5

Table 52--Continued.

Variables		n=450 Total sample Gen Vs Offender		n=401 General 12- n=16	13+ n=33	n=49 Gen Vs Offender 12- n=252	13+ n=16	n=278 Gen Vs Offender 12- n=252	n-16	n=172 Gen Vs Offend 13+ n=138	n=34
dangerob	Present	3.7	12.2	97.0	94.9	86.7	88.2	97.0	86.7	94.9	88.2
	Omitted	96.3	87.8*	3.0	5.1	13.3	11.8	3.0	13.3	5.1	11.8
dangerac	Present	2.7	10.2	1.9	4.3	93.3	88.2	98.1	93.3	95.7	88.2
	Omitted	97.3	89.8*			6.7	11.8	1.9	6.7	4.3	11.8

* Indicates significance within the cell.

TABLE 53

HFD PERCENTAGE RESPONSES

Variables		n=450 Total Sample Gen Vs Offen		n=401 General		n=49 Offender		n=278 Gen Vs Offend		n=172 Gen Vs Offend	
				12- n=252	13+ n=149	12- n=16	13+ n=33	12- n=252	n=16	13+ n=138	n=34
feet	Present	91.5	93.9	94.4	86.6	93.7	93.9	94.4	93.7	86.6	93.9
	Omitted	8.5	6.1	5.6	13.4*	6.2	6.1	5.6	6.2	13.4	6.1
legs	Present	96.0	95.9	97.6	93.3	100.0	93.9	97.6	100.0	93.3	93.9
	Omitted	4.0	4.1	2.4	6.7*	0.0	6.1	2.4	0.0	6.7	6.1
neck	Present	77.1	79.6	72.2	85.2	62.5	87.9	72.2	62.5	85.2	87.9
	Omitted	22.9	20.4	27.8	14.8	37.5	12.1	27.8	37.5	14.8	12.1
poor integration	Present	26.9	28.6	67.1	83.2	56.2	78.8	67.1	56.2	83.2	78.8
	Omitted	73.1	71.4	32.9	16.8*	43.7	21.2	32.9	43.7	16.8	21.2
shading/ face	Present	13.5	4.1	89.3	81.9	100.0	93.9	89.3	100.0	81.9	93.9
	Omitted	86.5	95.9	10.7	18.1*	0.0	6.1	10.7	0.0	18.1	6.1
2ndsexchar- acteristics	Present	11.0	6.1	91.7	84.6	93.7	93.9	91.7	93.7	84.6	93.9
	Omitted	89.0	93.9	8.3	15.4*	6.2	6.1	8.3	6.2	15.4	6.1

Table 53--Continued.

Variables		n=450 Total Sample Gen Vs Offen		n=401 General 12- n=252	n=401 General 13+ n=149	n=49 Offender 12- n=16	n=49 Offender 13+ n=33	n=278 Gen Vs Offend 12- Gen n=252	n=278 Gen Vs Offend 12- Offend n=16	n=172 Gen Vs Offend 13+ Gen n=138	n=172 Gen Vs Offend 13+ Offend n=34
blackening/ Shading	Present	11.5	2.0	89.7	86.6	100.0	97.0	89.7	100.0	86.6	97.0
	Omitted	88.5	98.0	10.3	13.4	0.0	3.0	10.3	0.0	13.4	3.0
teeth	Present	15.7	36.7	85.3	82.6	50.0	69.7	83.5	50.0	82.6	69.7
	Omitted	84.3	63.3*	14.7	17.4	50.0	30.3	14.7	50.0	17.4	30.3
dangerous objects	Present	5.7	14.3	94.0	94.6	75.0	90.9	94.0	75.0	94.6	90.9
	Omitted	94.3	85.7*	6.0	5.4	25.0	9.1	6.0	25.0	5.4	9.1
large hands	Present	7.7	22.4	91.3	94.0	50.0	90.9	91.3	50.0	94.0	90.9
	Omitted	92.3	77.6*	8.7	6.0	50.0	9.1*	8.7	50.0	6.0	9.1
large feet	Present	6.0	18.4	94.4	93.3	75.0	84.8	94.4	75.0	93.3	84.8
	Omitted	94.0	81.6*	5.6	6.7	25.0	15.2	5.6	25.0	6.7	15.2
short arms	Present	11.5	30.6	89.7	86.6	81.2	63.6	89.7	81.2	86.6	63.6
	Omitted	88.5	69.4*	10.3	13.4	18.8	36.4	10.3	18.8	13.4	36.4

Table 53--Continued.

Variable		n=450 Total Sample Gen Vs Offend	n=401 General 12- n=252	13+ n=149	n=49 Offender 12- n=16	13+ n=33	n=278 Gen Vs Offend 12- n=252	13+ n=16	n=172 Gen Vs Offed 12- n=138	13+ n=34
tiny figure	Present	6.7	91.3	96.6	100.0	100.0	91.3	100.0	96.6	100.0
	Omitted	93.3	8.7	3.4	0.0	0.0	8.7	0.0	3.4	0.0
big figure	Present	11.0	85.7	94.6	75.0	97.0	85.7	75.0	94.6	97.0
	Omitted	89.0	14.3	5.4	25.0	3.0	14.3	25.0	5.4	3.0

* Indicates significance within the cell.

APPENDIX F

KFD and HFD ANALYSIS SCORING SHEETS

KENTIC FAMILY DRAWING ANALYSIS SCORING SHEET

AGE _____ GENERAL _____ I.D. # _____

OFFENDER _____

OMISSIONS:
(Circle if present)
S M D
1 2 3 Facial features
1 2 3 Body
1 2 3 Arms
1 2 3 Hands
1 2 3 Feet
(Check if present)
_____ Father
_____ Mother

MISCELLANEOUS:
(Check if present)
____ Genitals
____ Secondary sex characteristics (breasts, beards)
____ Blackening/shading
____ Figure slanting 15°+
____ Like to live in family

SIZES:
(Circle if present)
S M D
1 2 3 Long neck
1 2 3 Large hands
1 2 3 Large feet
(Check if present)
_____ Gross asymmetry of limbs
_____ Poor integration of body parts

AGGRESSIVE SIGNS/BEHAVIORS:
(Check if present)
____ Dangerous objects (guns, knives, weapons)
____ Dangerous activities/objects (kicking, shooting)
____ Teeth

NURTURE:
(Check if present)
_____ By father
_____ By mother

DISTANCING:
(Check if present)
_____ From father
_____ From mother

BARRIERS:
0=Person(s) not present
1=No significant barrier
2=2 or less persons between
3=More than 2 persons between
4=Hinders physical contact
5=Inhibits visual contact
(Write applicable number)
_____ Self and Mom
_____ Self and Dad
_____ Mom and Dad

HUMAN FIGURE DRAWING ANALYSIS SCORING SHEET

AGE _____ GENERAL _____ I.D. # _____

OFFENDER _____

(In each category, check if present)

OMISSIONS:
_____ Eyes
_____ Mouth
_____ Arms
_____ Feet
_____ Nose
_____ Body
_____ Legs
_____ Neck

SIZES:
_____ Tiny head -1/10th total height
_____ Long Neck
_____ Long arms
_____ Large hands
_____ Large feet
_____ Short arms
_____ Arms w/o hands/fingers
_____ Tiny figure -2"
_____ Big figure +9"

QUALITY SIGNS:
_____ Poor integration of figure parts
_____ Gross limb asymmetry
_____ Slanting figure
_____ Transparencies
_____ Shading of face
_____ Shading of hands/neck
_____ Shading of body/limbs

SPECIAL FEATURES:
_____ Legs pressed together
_____ Genitals
_____ Secondary sex characteristics (breasts and beards)
_____ Blackening/shading
_____ Teeth
_____ Dangerous objects (guns, knives, weapons)
_____ Dangerous activities/behaviors (hitting, kicking, shooting)

APPENDIX G

INSTRUMENTS AND CONSENT FORMS

AUTHORIZATION FOR THE ADMINISTRATION
OF
KINETIC FAMILY AND HUMAN FIGURE DRAWINGS

These drawings are being requested as a part of the intake and assessment procedures of Linn County Mental Health. Information gained may be used in developing therapy and treatment plans for those clients who submit drawings.

As part of a research project, a study of these drawings is being conducted by Linn County Doctoral Psychology Intern L. Curtis Miller. This project involves analyzing the drawings along with brief demographic information that involves no know hazards, risks, or inconveniences.

All information collected will be held in the strictest confidence. No names, addresses, phone numbers, or any other information connecting any person to any drawing will be asked for or used. While information from the drawings may be published in a doctoral dissertation, professional books, or journals, complete anonymity is promised each person submitting drawings.

I hereby give permission for these drawings to be done by

_____

I consent to supplying demographic information. I give my permission to Linn County Mental Health Services to use research data in planning therapy and treatment plans and permission to L. Curtis Miller to use the data anonymously in his doctoral dissertation and/or professional publications. I understand no names will be used in the dissertation or any publication.

_____ Date _____
(Signature)

[Form used for clinic population]

AUTHORIZATION FOR THE ADMINISTRATION
OF
KINETIC FAMILY AND HUMAN FIGURE DRAWINGS

These drawings are being requested as part of the doctoral dissertation research by L. Curtis Miller, doctoral student in counseling psychology at Andrews University, Berrien Springs, Michigan.

A part of the research involves analyzing Kinetic Family and Human Figure Drawings by juveniles between the ages of seven and seventeen years of age. The drawings, along with brief demographic information, allows for complete anonymity on the part of the person who makes the drawings and involves no known hazards, risks, or inconveniences.

All information collected will be held in the strictest confidence. No names, addresses, phone numbers, or any other information connecting any person to any drawing will be asked for or used. While information from the drawings may be published in a doctoral dissertation, professional books or journals, complete anonymity is promised each person submitting drawings.

I hereby give permission for these drawings to be done by

_____

I consent to supplying brief demographic information to L. Curtis Miller of Andrews University for him to use the research data anonymously in his doctoral dissertation and/or professional publications. I understand no names will be used in the dissertation or any publication.

_____ Date _____
(Signature)

[Form used for general population]

PROCEDURE FOR OBTAINING KINETIC FAMILY AND HUMAN FIGURE DRAWINGS

Drawings are to be obtained from individual subjects. Subjects are to be seated at a desk or table suitable for drawings. Place a sheet of plain white 8 1/2 by 11-inch paper directly in front of the child. Provide a No. 2 lead pencil for the child to use. Give the following 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--SOME KIND OF ACTION.

After this drawing is completed, give the the child a second sheet of paper with these these instructions:

> ON THIS PIECE OF PAPER, I WOULD LIKE YOU TO DRAW A WHOLE PERSON. IT CAN BE ANY KIND OF A PERSON YOU WANT TO DRAW, JUST MAKE SURE THAT IT IS A WHOLE PERSON AND NOT A STICK FIGURE OR A CARTOON FIGURE.

After the drawings are completed, obtain from the subject and/or the students school file the information needed for the demographic sheet. Assign each drawing a case I. D. This will be your initials followed by a number you assign for the drawing. Your numbering system should begin with the first set of drawings you receive--make that set No. 1, then number each subsequent set "2", "3", "4", etc. (For example, if I supplied drawings for this project, I would number the first set "LCM 1".) No name or any other mark that could enable identification of the subject by me or anyone helping me with this research should be on any of these sheets.

Give or mail each set of drawings to me as soon as possible after you have obtained them.

L. CURTIS MILLER
92420 Territorial Road
Junction City, OR 97448
503/998-1820

OR

C/O Linn County Mental Health
799 Long Street
Sweet Home, OR 97386
503/367-3888
FAX: 503/367-2407

THANK YOU!

DEMOGRAPHIC QUESTIONNAIRE

(To be completed by person surpervising the drawing procedure. Please answer all questions to the best of your knowledge. All information is for the subject who did the drawings.)

****

CASE ID _____ Site of Drawing _____

(Case ID = Initials of person supervising drawing and number assigned subject who did drawings.)

****

1. Birthdate: ___/___/___ 2. Age __ 3. Sex __M __F

4. Grade __ Has subject been in special education? __ yes __ no

6. Is subject developmentally disabled? __ yes __ no

   Is subject learning disabled? __ yes __ no

7. To your knowledge, has subject received counseling

   therapy? __ yes __ no

8. Ethnic origin: __ Black __ Causian __ Hispanic

   __ Native American __ Oriental __ Other

9. Grew up in home with: __ both biological parents

   __ biological mother only __ biological father only

   __ adoptive parents __ biological mother & stepfather

   __ foster parents __ biological father & stepmother

10. Number of children in the subject's family ____

    Subject's place in birth order (1st, 2nd, etc.) ____

11. Number of siblings in family: __ brother(s) __ sister(s)

    __ half-brother(s) __ half-sister(s)

    __ stepbrother(s) __ stepsister(s)

    __ adopted brother(s) __ adopted sister(s)

12. In actual life, which person in your family drawing is:

    the tallest _____ the shortest _____

APPENDIX H

CORRESPONDENCE

LINN COUNTY DEPARTMENT OF HEALTH SERVICES
799 LONG STREET, SWEET HOME, OR 97386
PHONE: 367-3888 FAX: 367-2407

Public Health
Mental Health
Alcohol & Drug Treatment

July 27, 1994

To Whom It May Concern:

L. Curtis Miller joined the staff of Linn County Mental Health Services January 4, 1993, as a doctoral psychology intern. Upon completion of his internship, he became a full-time counseling therapist on our staff.

We are happy to cooperate with him on his research project for his doctoral dissertation. In harmony with his research plan, the child and family section of Linn County Mental Health Services has made it a part of the regular intake procedures for new clients to provide Human Figure Drawings and Kinetic Family Drawings as a part of the diagnostic, assessment, and treatment planning process. Clients and/or their legal guardians sign a permission form granting L. Curtis Miller the right to use these drawings in his research for his dissertation.

Sincerely,

Dennis Dahlen, M.S.W.
Administrator, Linn County Dept. of Health Services

Oregon Conference of
Seventh-day Adventists

13455 S.E. 97th Ave. • Clackamas, OR 97015-8662 • 503/652-2225 • FAX 503/654-5657

August 3, 1994

Curtis Miller
92420 Territorial Road
Junction City, OR 97448

Dear Curtis:

The Oregon Conference Office of Education grants permission to L. Curtis Miller of Linn County Mental Health Services and Andrews University to obtain human figure and kinetic family drawings from students 7 to 17 years of age in selected Oregon Conference elementary schools.

It is understood that these drawings will be used in research by Curtis Miller for his doctoral dissertaton. These drawings will be provided anonymously with no known psychological risk involved.

Sincerely,

Ed Boyatt

C. Edward Boyatt, Ed.D.
Superintendent of Schools

ph

cc Dr. Else Jackson

Sweet Home School Dist. No. 55

1920 LONG ST SWEET HOME, OREGON 97386 (503)-367-6111

William A. Hampton - Superintendent · Erland C. Erickson - Business Manager

August 9, 1994

To Whom It May Concern:

Permission was given by Sweet Home School District #55 in Sweet Home, Oregon, to allow L. Curtis Miller, of Linn County Mental Health Services and of Andrews University, to obtain Kinetic Family and Human Figure Drawings to use for his doctoral dissertation.

Sincerely,

W. A. Hampton

William A. Hampton, Superintendent

WAH is Cortes/C Miller permission

LINN COUNTY DEPARTMENT OF HEALTH SERVICES
799 LONG STREET, SWEET HOME, OR 97386
PHONE: 367-3888 FAX: 367-2407

Public Health
Mental Health
Alcohol & Drug Treatment

April 11, 1995

Toni Cavanagh-Johnson, Ph.D.
1101 Fremont Avenue Suite 101
South Pasadena, CA 91030

Dear Dr. Johnson.

I attended your recent presentation on Children with Sexual Problems at Rogue Valley Medical Center in Medford last week. It was very helpful to me, but I wish I had had such an opportunity prior to completing the collection of my dissertation research data for my doctoral program.

I am completing my doctorate in counseling psychology at Andrews University, Berrien springs, Michigan. My dissertation compares the Kinetic Family Drawings and Human Figure Drawings of a normal population of males between the ages of 8-17 years with the same drawings by known male sexual offenders of the same age. My research data is currently undergoing computer program analysis at Andrews University and shortly I will complete writing the final two chapters of the dissertation. From your lecture and handouts I find material that I believe will strengthen my dissertation.

During one of your lecture breaks last week I asked if you would give me permission to use some of your material in my dissertation. Your replied that such permission was possible and asked me to make my request in writing.

I wish your permission to use:

1) Children's Sexual Behaviors From Normal To Disturbed (3 pages), which would probably appear as Tables in Chapter III of my dissertation.

2) Group Membership Sheet (describing the four groups)

3) Children's Sexual Behaviors Which Cause Concern (a list of 21 such behaviors).

In my writings thus far, I have already cited several times the book you co-authored with E. Gil, for I found it very useful.

In your Medford presentation you used several overheads that were news articles featuringvery young children who molested, such as the two seven year-old Indianapolis boys. If you could, I would aprreciate copies of several such articles. They would serve me in my dissertation text and in my clinical practice.

Sometime, I hope to avail myself for clinical training under you to enhance my therapy skills in my practice. Perhaps you could send me material that would describe the training you provide?
I thank you for your kind consideration of my request to use the above mentioned materials in my dissertation.

Sincerely,,

L. Curtis Miller, M. A., M. S. W.
Doctoral Candidate, Andrews University
Mental Health Specialist, Linn County Mental Health

Toni Cavanagh Johnson, Ph.D.
Licensed Clinical Psychologist

April 19, 1995

L. Curtis Miller
Linn County Dept. of Health Svcs.
799 Long St.
Sweet Home, OR 97386

Dear L. Curtis Miller,

I would be happy to give you permission to use my work. I would also like to see your dissertation. It sounds very interesting.

I have included a few newspaper articles.

Sincerely,

Toni Cavanagh Johnson, Ph.D.

enclosures

1101 Fremont Ave., Suite 104 • S. Pasadena, CA 91030 • (818)799-4522 • FAX (818)790-0139
Psychotherapy, Training and Consultation • Therapeutic Games and Publications

REFERENCE LIST

REFERENCE LIST

Abel, G. G., Becker, J., Cunningham-Rathner, J., Roleau, J., Kaplan, M., & Reich, J. (1984). The treatment of child molesters. Unpublished manuscript, Columbia University, New York (available from SBC-TM, 722 W. 168th St., Box 17, New York, NY 10032).

Abel, G., Mittelman, M., & Becker, J. (1985). Sex offenders: Results of assessment and recommendations for treatment. In H. Ben-Aaron, S. Hucher, & C. Webster (Eds.), Clinical Criminology: Current Concepts. Toronto: M & M Graphics.

Acosta, M. L. (1989). The Kinetic Family Drawing: A developmental and validity study (Doctoral dissertation, University of Washington). Dissertation Abstracts International, 50/08B, 3680.

Adams-Tucker, C., & Adams, P. (1984). Treatment of sexually abused children. In S. Greer (Ed.), Victims of sexual aggression. New York: Van Nostrand Reinhold.

Alessandrini, S. M. (1985). An evaluation of Kinetic Family Drawing scoring variables and directions. Doctoral dissertation, Hofstra University.

Allen-Baley, C. (1983, May). For the kid's and parent's sake. World Vision, p. 11.

Alschuler, R. H., & Hattwick, L. W. (1947). Painting and personality: A study of young children (2 vols.). Chicago: University of Chicago Press.

Alter-Reid, K., Gibbs, M. S., Lachenmeyer, J. R., Seigal, J., & Massoth, N. A. (1986). Sexual abuse of children: A review of the emperical findings. Clinical Psychology Review, 6, 249-266.

Anastasi, A. (1976). Psychological testing (4th ed.). New York: Aronson.

Anastasi, A., & Foley, J., Jr. (1940). A survey of the literature on artistic behavior in the abnormal, III. Spontaneous Productions. Psychological Monography, 52, 71.

Appel, L. E. (1931). Drawings by children as aids to personality studies. American Journal of Orthopsychiatry, 1, 129-144.

Bakwin, H. (1974). Erotic feelings of infants and young children. Medical Aspects of Human Sexuality, 8(10), 200-215.

Banning, A. (1989). Mother-son incest: Confronting a prejudice. Child Abuse, 13, 561-570.

Barkdull, C. J. (1989). Mapping family dynamics through Kinetic Family Drawing and Family Environment Scale (Doctoral dissertation, Marquette University). Dissertation Abstracts International, 50/11A, 3751.

Bellak, L. (1944). The concept of projection. Psychiatry, 7, 353-370.

Bellak, L. (1950). On the problems of the concept of projection: A theory of apperceptive distortion. In L. Abt and L. Bellak (Eds.), Projective Psychology (pp. 7-32).

Bender, L. (1937). Art and therapy in the mental disturbace of children. Journal of Nervous and Mental Disorders, 86, 249-263.

Blatt, S. J. (1975). The validity of projective techniques and their research and clinical contribution. Journal of Personality Assessment, 39(4), 327-343.

Brannigan, G. G., Schofield, J. J., & Holtz, R. (1982). Family drawings as measures of interpersonal distance. The Journal of Social Psychology, 117, 155-156.

Brewer, F. (1980). Children's interaction patterns in Kinetic Family Drawings. (Doctoral dissertation, United States International University). Dissertation Abstracts International, 41/11B, 4253.

Briere, J. (1989). Therapy for adults molested as children: Beyond survival. New York: Springer.

Briere, J., & Runtz, M. (1988). Symptomatology associated with childhood sexual victimization in a non-clinical adult sample. Child Abuse and Neglect, 12, 51-59.

Britain, S. D. (1970). Effect of manipulation of children's effect on their family drawings. Journal of Projective Techniques and Personality Assessment, 34, 324-327.

Buck, J. N. (1948). The H-T-P technique: A quantitative and qualitative scoring manual. Journal of Clincal Psychology, 14, 268-275.

Burgess, A. W., Hartman, C. R., & McCormack, A. (1987). Abused to abuser: Antecedents of socially deviant behavior. American Journal of Psychiatry, 144, 1431-1436.

Burns, R. C. (1982). Self growth in families: Kinetic Family Drawings (K-F-D) research and applications. New York: Brunner/Mazel.

Burns, R., & Kaufman, S. (1970). Kinetic Family Drawings (K-F-D): An introduction to understanding children through kinetic drawings. New York: Brunner/Mazel.

Burns, R., & Kaufman, S. (1972). Actions, styles, and symbols in Kinetic Family (K-F-D): An interpretive manual. New York: Brunner/Mazel.

Cargo, A. P. (1989). Children's concept of family: Early latency aged children in divorced and intact families (Master's thesis, The American University). Master's Abstracts International, 18/01, 162.

Carp, F. M. (1950). Psychological constriction on several projective tests. Journal of Consulting Psychology, 14, 268-275.

Carr, C. (1994, July 17). Alas, child abuse is nothing new. Parade Magazine, p. 6.

Cavanagh-Johnson, T. (1988). Child perpetraters: Children who molest children. Child Abuse and Neglect: The International Journal, 12(2), 219-229.

Chartouni, T. T. (1992). Self-concept and family relations of American-Lebanese: A descriptive and comparative study. Doctoral dissertation, Andrews University.

Chase, D. A. (1987). An analysis of Human Figure and Kinetic Family Drawings of sexually abused children and adolescents (Doctoral dissertation, University of Massachusetts). Dissertation Abstracts International, 48/08A, 338.

Cho, M. M. (1987). The validity of the Kinetic Family Drawing as a measure of self-concept and parent/child relationship among Chinese children in Taiwan. (Doctoral dissertation, Andrews University). Dissertation Abstracts International, 48/08A, 2020.

Chuah, V. N. (1992). Kinetic Family Drawings of Chinese-American children. Doctoral dissertation, Andrews University.

Coleman, J. C. (1969). The level's hypothesis: An examination and re-orientation. Journal of Projective Techniques and Personality Assessment, 33, 118-122.

Conant, M. S. (1988). Toward the validation of the Kinetic Family Drawing (Doctoral dissertation, Adelphi University). Dissertation Abstracts International, 50/025, 743.

Conoley, J. C., & Kramer, J. J. (Eds.). (1989). The 10th mental measurement yearbook (pp. 422-423). Highland Park, NJ: Gryphon Press.

Conte, J., & Berliner, L. (1988). The impact of sexual abuse on children: Empirical findings. In L. Welher (Ed.), Handbook of sexual abuse of children (pp. 72-93). New York: Springer.

Cummings, J. A. (1980). An evaluation of the Objective Scoring System for KFDs. Dissertation Abstracts International, 41(6-A), 2313.

Cunningham, C., & MacFarlane, K. (1991). When children molest children. Orwell, VT: The Safer Society Press.

Dalby, J. T., & Vale, H. L. (1977). Self-esteem and children's human figure drawings. Perceptual and motor skills, 44, 1279-1282.

Daro, D., & McCurdy, K. (1991). Current trends in child abuse reporting and fatalities: The results of the 1990 annual fifty state survey. (Working paper No. 808). Chicago: National Center on Child Abuse Prevention Research, National Committee for Prevention of Child Abuse.

DeJong, A. R., Emmet, G. A., & Hervada, A. A. (1982). Epidemiologic factors in sexual abuse of boys. American Journal of Diseases of Children, 136, 990-993.

Dennis, W. (1966). Group values through children's drawings. New York: John Wiley & Sons.

Deren, S. (1975). An empirical evaluation of the validity of the Draw-A-Family-Test. Journal of Clinical Psychology, 31, 542-546.

Despert, J. L. (1938). Emotional problems in children. New York: New York State Hospital Press.

Di Leo, J. H. (1970). Young children and their drawings. New York: Brunner/Mazel.

Di Leo, J. H. (1973). Children's drawings as diagnostic aids. New York: Brunner/Mazel.

Di Leo, J. H. (1983). Interpreting children's drawings. New York: Brunner/Mazel.

Earls, C. M. (1983). Some issues in the assessment of sexual deviance. International Journal of Law and Psychiatry, 6, 431-441.

Ellerstein, N. S., & Canavan, M. D. (1980). Sexual abuse in boys. American Journal of Diseases of Children, 134, 255-257.

Falk, J. (1981). Understanding children's art: An analysis of the literature. Journal of Personality Assessment, 45(5), 465-472.

Fancher, R. E. (1973). Psychoanalytic psychology: The development of Freud's thought. New York: Norton.

Farber, E. D., Showers, J., Johnson, C. F., Joseph, J. A., & Oshins, L. (1984). The sexual abuse of children: A comparison of male and female victims. Journal of Clinical Child Psychology, 13(3), 294-297.

Finkelhor, D. (1979). Sexually victimized children. New York: Free Press.

Finkelhor, D. (1984). Child sexual abuse: New theory and research. New York: Free Press.

Finkelhor, D. (Ed.). (1986). Sourcebook on child sexual abuse. Beverly Hills, CA: Sage.

Finkelhor, D., & Dziuba-Leatherman. (1994). Victimization of children. American Psychologist, 49(3), 173-183.

Frank, L. K. (1939). Projective methods for the study of personality. Jornal of Psychology, 8, 339-412.

Frank, L. K. (1948). Projective methods. Springfield, IL: Charles C. Thomas.

Freeman-Longo, R. E. (1983). Juvenile Sexual offenses in the history of adult rapists and child molesters. International Journal of Offender Therapy and Comparative Criminology, 27(2), 150-155.

Freud, S. (1924). The anxiety neurosis. In Collected Papers. London: Hogarth Press.

Freud, S. (1928). The future of an illusion. London: Hogarth Press.

Freud, S. (1938). Basic writings of Sigmund Freud. A. A. Bull (Ed.). New York: Random House.

Friedrich, W. N. (1990). Psychotherapy of sexually abused children and their families. New York: W. W. Norton.

Friedrich, W., & Luecke, W. (1988). Young school-age sexually aggressive children. Professional Psychology Research and Practice, 19(2), 155-164.

Fuller, G. R., Preuss, M., & Hawkins, W. F. (1970). The validity of the Human Figure Drawings with disturbed and normal children. Journal of School Psychology, 8, 54-56.

Gardano, A. (1988). A revised scoring method for Kinetic Family Drawings and its application to the evaluation of family struction with an emphasis on children from alcoholic families. Doctoral dissertation, George Washington University.

Garland, R. J., & Dougher, M. J. (1990). The abused/abuser hypothesis of child sexual abuse: A critical review of theory and research. In J. Feierman (Ed.), Pedophillia: Biosocial dimensions. New York: Springer-Verlag.

German, D. (1986). The female adolescent incest victim: Personality, self-esteem, and family orientation. Doctoral dissertation, Andrews University.

Gersten, J. C. (1978). Review of the Kinetic Family Drawings. In O. K. Buros (Ed.), The eighth mental measuring yearbook. Highland Park, NJ: Gryphon Press.

Gil, E. (1987). Children who molest. Walnut Creek, CA: Launch Press.

Gil, E., & Johnson, T. C. (1993). Sexualized children: Assessment and treatment of sexualized children and children who molest. Rockville, MD: Launch Press.

Golomb, A. (1987). Graphic strategies of emotionally disturbed children. Visual Arts Research, 13, 68-79.

Goode, Erica. (1994, September 19). Battling deviant behavior. U. S. News and World Report, pp. 74-76.

Goodwin, J. (1982). Sexual abuse: Incest victims and their families. Boston: John Wright, P.S.G.

Goodenough, F. L. (1926). Measurement of intelligence by drawing. New York: Harcourt, Brace & World.

Goodenough, F. L. (1928). Studies in the psychology of children's drawings. Psychological Bulletin, 25, 272-283.

Gregory, S. A. (1992). A validation and comparative study of Kinetic Family Drawings of Native American children. Doctoral dissertation, Andrews University.

Groth, A. N. (1979). Sexual trauma in the life histories of rapists and child molesters. Victimology, 4, 10-16.

Haciak, J. A. (1993). Differentiating situational and preference child molesters using a Penile Plethysmograph. Doctoral dissertation, University of Northern Colorado.

Hackbarth, S. G. (1988). A comparison of Kinetic Family Drawing variables of sexually abused children, unidentified children, and their mothers. Doctoral dissertation, East Textas State University.

Hammer, E. F. (Ed.). (1958). The clinical application of projective drawings. Springfield, IL: Charles C. Thomas.

Hammer. E. F. (1969). DAP: Back against the wall? Journal of Consulting and Clinical Psychology, 33, 151-156.

Hanfmann, E., & Getzels, J. W. (1953). Studies of the Sentence Completion Test. Journal of Projective Techniques, 17, 280-294.

Harris, D. B. (1963). Children's drawings as measures of intellectual maturity. New York: Harcourt, Brace & World.

Harris, D. B. (1978). Review of the Kinetic Family Family Drawing Test. In O. K. Buros (Ed.), The eighth mental measurements yearbook. Highland Park, NJ: Gryphon Press.

Healy, W., Bronner, A., & Bowers, A. (1930). The structure and meaning of psychoanalysis. New York: Knoph.

Herbert, M. (1985). What principals should know about child abuse. Princiapl, 65(2), 9-14.

Herman, J. L., & Hirschman, L. (1981). Father-daughter incest. Cambridge: Harvard University Press.

Hindman, J. (1988, July/August). Research disputes assumptions about child molesters. National District Attorneys Association Bulletin, 7(4), 1-3.

Hindman, J. (1991). The mourning breaks. Ontario, OR: AlexAndria Associates.

Holmes, D. S. (1968). Dimensions of projection. Psychological Bulletin, 69(4), 248-268.

Howe, J. W., Burgess, A. W. , & McCormack, A. (1987). Adolescent runaways and their drawings. The Arts in Psycholtherapy, 14, 35-40.

Howells, J. G., & Lickorish, J. K. (1976a). Family relations indicator. Edinburgh: Oliver & Boyd.

Howells, J. G., & Lickorish, J. K. (1976b). A projective technique for assessing family relationships. Journal of Clinical Psychology, 25, 304-407.

Hulse, W. C. (1951). The emotionally disturbed child draws his family. Quarterly Journal of Child Behavior, 3, 152-174.

Hulse, W. C. (1952). Childhood conflict expressed through family drawings. Journal of Projective Techniques, 16, 66-79.

Ingrassia, M., Annin, P., & Biddle, N. (1993, July 19). Life means nothing. Newsweek, pp. 16-17.

Issac, C. (1986). Identification and interruption of sexually offending behaviors in prepubescent children. Paper presented at the 16th Annual Child Abuse and Neglect Symposium, Keystone, CO.

Jacobson, D. A. (1973). A study of Kinetic Family Drawings of public school children ages 6-9. Dissertation Abstracts International, 34, 2935 (University Microfilms No. 73-29, 455)

Johnson, S. R., & Gloye, E. E. (1958). A critical analysis of psychological treatment of children's drawings. Journal of Aesthetics Art Crit., 17, 242-250.

Johnson, T. C. (1988a). Child perpetrators--children who molest other children: Preliminary findings. Child Abuse and Neglect, 12, 219-229.

Johnson, T. C. (1988b). Child perpetraters--children who molest other children: Preliminary findings. Child Abuse and Neglect, 13, 571-585.

Johnson, T. C. (1989). Female child perpetraters: Children who molest other children. Child Abuse and Neglect, 13, 571-585.

Johnson, T. C. (1994). Children's sexual behaviors which cause concern. 1101 Fremont Ave., Suite 101, S. Pasaden, CA 91030.

Johnston, D. D. (1975). Comparison of DAF and K-F-D in children from intact and divorced homes. Thesis Abstracts. California State University, San Jose.

Jolles, I. (1952). A study of the validity of some hypotheses for the qualitative interpretation of the H-T-P for children of elementary school age: I. sexual identification. Journal of Clinical Psychology, 8, 113-118.

Jones, L. W., & Thomas, C. B. (1961). Studies on figure drawings. Psychiatric Quarterly Supplement, 35, 212-261.

Jordon, S. J. (1985). A validity study of the Kinetic Family Drawing. (Doctoral dissertation, Texas Woman's University). Dissertation Abstracts International, 46/06B, 2066.

Juni, S. (1980). Projection. Genetic Psychology Monographs, 101(1), 111-146.

Kempe, S., & Kempe, C. H. (1984). The common secret: Sexual abuse of children and adolescents. New York: W. H. Freeman.

Kilpatrick, D. (1992). Rape in America: A report to the nation. Charleston, SC: Crime Victims Research Center.

Kinget, G. M. (1952). The Drawing Completion Test: A projective technique for the investigation of personality. New York: Grune & Stratton.

Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). Sexual behavior in the human male. Philadelphia: W. B. Sanders.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). Sexual behavior in the human female. Philadelphia: W. B. Sanders.

Klepsch, M., & Logie, L. (1982). Children draw and tell. New York: Brunner/Mazel.

Knoff, H. M. (1983). Justifying projective/personality assessment in school psychology: A response to Batsche and Peterson. School Psychology Review, 12(4), 446-451.

Knoff, H. M., & Prout, H. T. (1985a). Kinetic drawing system for family and school: A handbook. Los Angeles: Western Psychological Services.

Knoff, H. M., & Prout, H. T. (1985b). The Kinetic Family Drawing System: A review and integration of the Kinetic Family and School Drawing techniques. Psychology in the Schools, 22, 50-59.

Kohn, A. (1987, February). Shattered innocence. Psychology Today, pp. 54-58.

Koppitz, E. M. (1968). Psychological evaluation of children's Human Figure Drawings. New York: Grune & Stratton.

Koppitz, E. M. (1983). Projetive drawings with children and adolescents. School Psychology Review, 12(4), 421-427.

Koppitz, E. M. (1984). Psychological evaluation of human figure drawings by middle school pupils. New York: Grune & Stratton.

Korner, A. F. (1950). Theoretical considerations concerning the scope and limitations of projective techniques. Journal of Abnormal and Social Psychology, 45.

Korner, A. F. (1965). Theoretical considerations concerning the scope and limitations of projective techniques. In B. I. Murstein (Ed.), Handbook of projective techniques (pp. 23-34). New York: Basic Books.

Lankester, D., & Meyer, B. (1986). Relationship of family stucture to sex offense behavior. Paper presented at First National Conference on Juvenile Sexual Offending, Minneapolis, MN.

Lanyon, R. I. (1986). Theory and treatment in child molestation. Journal of Consulting and Clinical Psychology, 54, 176-182.

Layton, M. C. (1984). Specific features in the Kinetic Family Drawings of children. Dissertation Abstracts International, 45, 356B (University Microfilms, No. 84-10, 204).

Ledesma, L. (1979). The Kinetic Family Drawings (KFD) of Filipino adolescents (Doctoral dissertation, Boston College). Dissertation Abstracts International, 40/04B, 1866.

Levenberg, S. B. (1975). Professional training, psychodiagnostic skill, and Kinetic Family Drawings. Journal of Personality Assessment, 39(4), 389-393.

Levy, S. (1958). Projective figure drawing. In Hammer, The clincial application of projective drawings. Springfield, IL: Charles C. Thomas.

Lew, M. (1990). Vicitms no longer. (Reprint, originally published 1988 by Nevraumont). New York: Harper and Row.

Lewandowski, D. G., & Saccuzzo, D. P. (1976). The decline of psychological testing. Professional Psychology, 7, 177-184.

Lindzey, G. (1952). Thematic Apperception Test: Interpretive assumptions and related empirical evidence. Psychological Bulletin, 49, 1-25.

Lindzey, G. (1961). Projective techniques and cross-cultural research. New York: Appleton-Century-Cropts.

Lingren, R. H. (1971). An attempted replication of emotional indicators in human drawings by shy and aggressive children. Psychological Reports, 29, 35-38.

Longo, R. E. (1986). Sexual learning and experience among adolescent sexual offenders. International Journal of Offender Therapy and Comparative Criminology, 26, 235-241.

Longo, R. E., & Groth, A. N. (1983). Juvenile sexual offenses in the histories of adult rapists and child molesters. International Journal of Offender Therapy and Comparative Criminology, 27, 150-155.

Longo, R. E., & McFadin, B. (1981, December). Sexually inappropriate behavior: Development of the sexual offender. Law and Order, pp. 21-23.

Luquet, G. H. (1913). Les dessins d'un enfant [The drawings of a child]. Paris: F. Alcan.

MacFarlane, K., Waterman, J., Conerly, S., Damon, L., Durfee, M., & Long, S. (1986). Sexual abuse of young children. New York: The Guildford Press.

Machover, K. (1949). Personality projection in the drawing of the human figure. Springfield, IL: Charles C. Thomas.

Malmquist, C. P. (1985). Sexual offenses among adolscents. Medical Aspects of Human Sexuality, 19(9), 134-139.

Manning, T. (1987). Aggression depicted in abused children's drawings. The Arts in Psychotherapy, 14, 15-24.

Martin, R. P. (1983). The ethical issues in the use and interpretation of the Draw-A-Person Test and other similar projective procedures. The School Psychologist, 38(1), 6-8.

Masson, J. M. (1984). The assault on truth: Freud's suppression of the education theory. New York: Farrar, Straus & Girorux.

Mayer, A. (1983). Incest: A treatment manual for therapy with victims, spouses, and offenders. Holmes Beach, FL: Learning Publications.

Mayer, A. (1985). Sexual abuse: Causes, consequences and treatment of incestuous and pedophilic acts. Holmes Beach, CA: Learning Publications.

McCallister, R. (1983). Usefulness of the Kinetic Family Drawing in the assessmenc of aggression among the population of juvenile offenders (Doctoral dissertation, Auburn University). Dissertation Abstracts Internacional, 44/07B, 2252.

McGregor, J. P. (1978). Kinetic Family Drawing test: A validity study. Dissertation Abstracts International, 40, 927B-928B. (University Microfilms No. 79018, 101)

McKnight-Taylor, M. (1974). Perceptions of relationships in low income Black families (Doctoral dissertation, University of Virginia). Dissertation Abstracts International, 35/08A, 5127.

McPhee, J. P., & Wegner, K. W. (1976). Kinetic-Family-Drawing styles and emotionally disturbed childhood behavior. Journal of Personality Assessment, 40, 487-491.

Meyers, D. (1978). Toward an objective evaluation procedure for the Kinetic Family Drawing (KFD). Journal of Personality Assessment, 42, 358-365.

Miale, F. (1961). An approach to projective material. Springfield, IL: Charles C. Thomas.

Miller, T. W., Veltkamp, L. J., & Janson, D. (1987). Projection measures in the clinical evaluation of sexually abused children. Child Psychiatry and Human Development, 18(1), 47-57.

Mostkoff, D. L., & Lazarus, P. L. (1983). The Kinetic Family Drawing: The reliability of an objective scoring system. Psychology in Schools, 20, 16-20.

Mottinen, A. J. (1988). A descriptive study of the Kinetic Family Drawings of children from Catholic, Lutheran and Seventh-day Adventist religious backgrounds (Master's thesis, Andrews University). Master's Abstracts International, 27/03, 324.

Murstein, B. I. (1957). Studies in projection: A critique. Journal of Projective Techniques, 21, 129-136.

Murstein, B. I. (1959). A conceptual model of projective techniques applied to stimulus variations with thematic techniques. Journal of Consulting Psychology, 23(1), 3-14.

Murstein, B. I. (1961). Assumptions, adaptation level, and projective techniques. Perceptual and Motor Skills, 12, 107-125.

Murstein, B. I. (1965). Handbook of projective techniques. New York: Basic Books.

Naitove, C. E. (1982). Arts therapy with sexually abused children. In S. Sgoi (Ed.), Handbook of clinical intervention in child sexual abuse. Lexington, MA: D. C. Heath.

National Center on Child Abuse and Neglect (1984, December). Study of national incidence of child abuse and neglect. Washington D. C.

Naumberg, M. (1955). Art as symbolic speech. The Journal of Aesthetics and Art Criticism, 13, 435-450.

Nelson, W. P. (1989). An evaluation of a systematic skills training program for parents in stepfamilies (Doctoral dissertation, Boston University). Dissertation Abstracts International, 50/01A, 104.

Nuttall, E., Chieh, L., & Nuttall, R. (1988). Views of the family by Chinese and U. S. children: A comparative study of Kinetic Family Drawings. Journal of School Psychology, 26, 191-194.

O'Brien, R. P., & Patton, F. (1974). Development of an objective scoring method for the Kinetic Family Drawings (KFD). Journal of Personality Assessment, 58, 156-164.

Ogdon, D. P. (1986). Psychodiagnostics and personality assessment: A handbook (2nd ed.). Los Angeles: Western Psychological Services.

Paden-Gelster, K. L., & Feinauer, L. L. (1988). Divorce potential and marital stability of adult women not sexually molested as children. Journal of Sex and Marital Therapy, 14(4), 269-277.

Peterson, D. W., & Basche, G. M. (1983). School psychology and projective assessment: A growing incompatibility. School Psychology Review, 12(4), 440-445.

Pikunas, J., & Carberry, H. (1961). Standardization of the graphoscopic scale: The content of children's drawings. Journal of Clinical Psychology, 17, 297-301.

Porter, E. (1986). Treating the young male victim of sexual assault: Issues & intervention strategies. Orwell VT: The Safer Society Press.

Prentky, R. A., & Cerce, D. D. (1989). Thoughts on the developmental roots of sexual aggression. Develpment and Psycholpathology, 1, 153-169.

Protinsky, H. (1978). Children's drawings as emotional indicators. Elementary School Guidance and Counseling, 12(4), 248-255.

Rabin, A. I. (Ed.). (1981). Assessment with projective techniques. New York: Springer.

Rapaport, D. (1947). Psychological testing: Its practical and its heuristic significance. In M. Gill & J. Schaeffer (Eds.), Diagnostic psychological testing, 1. Chicago: Year Book.

Rapaport, D. (1952). Projective techniques and the theory of thinking. Journal of Projective Techniques, 16, 262-275.

Raskin, L. M., & Baker, P. G. (1977). Kinetic Family Drawings by children with perceptual-motor delays. Journal of Learning Disabilities, 10, 370-374.

Raskin, L. M., & Bloom, A. S. (1979). Kinetic Family Drawings by children with learning disabilities. Journal of Pediatric Psychology, 4, 247-251.

Raven, J. C. (1951). Controlled projection for children. London: K. K. Lewis.

Reinhart, M. A. (1987). Sexually abused boys. Child Abuse and Neglect, 11, 229-235.

Reynolds, C. (1978). A quick-scoring guide to the interpretation of children's Kinetic Family Drawings (KFD). Psychology in the Schools, 15, 489-492.

Reznikoff, M. Z., & Reznikoff, H. R. (1956). The family test: A comparative study of children's drawings. Journal of Clinical Psychology, 12, 167-169.

Rhine, P. C. (1978). Adjustment indicators in Kinetic Family Drawings by children: A validation study. Dissertation Abstracts International, 39, 995B. (University Microfilms No. 7813108)

Robach, H. B. (1968). Human Figure Drawings: Their utility in the clinical psychologist's aramentarium for personality assessment. Psychological Bulletin, 70, 1-19.

Rodgers, Peggy J. (1992). A correlational-developmental study of sexual symbols, actions, and themes in children's Kinetic Family and Human Figure Drawings. Doctoral dissertation, Andrews University.

Roscoe, B. (1984). Sexual abuse: The educator's role in identification and interaction with abuse victims. Education, Fall No. 1, 82-86.

Russell, D. E. H. (1984). Sexual exploitation. Beverly Hills, CA: Sage.

Russell, A. B., & Trainor, C. M. (1984). Trends in child abuse and neglect: A national perpsective. Denver: American Humane Association.

Rutkin, Z. (1988). Sexual preoccupation in sexually abused girls (Doctoral dissertation, Case Western Reserve University). Dissertation Abstracts International, 49/04B, 1400.

Ryan, G. (1988, April). The juvenile sexual offender: A question of diagnosis. Uniform Data Collection System, data on 1000 juvenile offenders. Presented at the meeting of National Symposium on Child Victimization, Anaheim, CA.

Ryan, G., & Blum, J. (Eds.). (1993). Understanding and responding to the sexual behavior of children. Denver: University of Colorado Health Sciences Center.

Ryan, G. D., & Lane, S. L. (Eds.). (1991). Juvenile sexual offending: Causes, consequences, and correction. Lexingon, MA: D. C. Heath.

Sahd, D. (1980). Psychological assessment of sexually abusing families and treatment implications. In W. Holder (Ed.), Sexual abuse of children. Englewood, CO: The American Humane Association.

Santoli, A. (1994, July 24). A better way to protect our children. Parade Magazine, pp. 12-13.

Sayed, A. J., & Leaverton, D. R. (1974). Kinetic Family Drawings of children with diabetes. Child Psychiatry and Human Development, 5, 40-50.

Schornstein, H. M., & Derr, J. (1978). The many applications of Kinetic Family Drawings in child abuse. The British Journal of Projective Psychology and Personality Study, 23, 33-35.

Schultz, D. P. (1990). Theories of personality (4th ed.). Pacific Grove, CA: Brooks/Cole.

Sedlak, A. J. (1991). Supplementary analyses of data on the national incidence of child abuse and neglect. Rockville, MD: Westat.

Sgroi, S. (1988). Vulnerable populations: Evaluation and treatment of sexually abused children and adult survivors (Vol. 1). Lexington, MA: D. C. Heath.

Sgroi, S. (1989). Vulnerable populations: Sexual abuse treatment for children, adult survivors, offenders, and persons with mental retardation (Vol. 2). Lexington, MA: D. C. Heath.

Shaw, J. (1989). A developmental study on the Kinetic Family Drawing for a nonclinic, Black child population in the midwestern region of the United States (Doctoral dissertation, Andrews University). Dissertation Abstracts International, 50/10B, 4797.

Shearn, C. R., & Russell, K. R. (1969). Use of the family drawing as a technique for studying parent/child interaction. Journal of Projective Techniques and Assessment, 33(1).

Showers, J., Farber, E., Joseph, J., Oshins, L., & Johnson, C. (1983). The sexual victimization of boys: A three-year survey. Health Values: Achieving High-Level Wellness, 7, 15-18.

Sidun, N. M. (1986). Graphic indicators of sexual abuse in adolescent draw-a-person test (Doctoral dissertation, Illinois School of Professional Psychology). Dissertation Abstracts International, 47/108, 4314.

Sidun, N. M., & Rosenthal, R. H. (1987). Graphic indicators of sexual abuse in draw-a-person tests of psychiatrically hospitalized adolescents. Arts in Psychotherapy, 14(1), 25-33.

Sims, G. T. (1979). Kinetic Family Drawings: A comparative study of styles, actions, and symbols of elementary school children's drawings. (Doctoral dissertation, University of Northern Colorado). Dissertation Abstracts International, 40/01A, 173.

Sobel, H., & Sobel, W. (1976). Discriminating adolescent male delinquents through the use of Kinetic Family Drawings. Journal of Personality Assessment, 40, 91-94.

Spencer, M. J., & Dunklee, P. (1986). Sexual abuse of boys. Pediatrics, 78, 133-138.

Stawar, T. L., & Stawar, D. E. (1987). Family Kinetic Drawings as a screening instrument. Perceptual Motor Skills, 65, 810.

Stone, H. K., & Dellis, N. P. (1960). An exploratory investigation into the level's hypothesis. Journal of Projective Techniques, 24, 33-40.

Summit, R., & Kryso, J. (1978). Sexual abuse of children: A clinical spectrum. American Journal of Ortho-psychiatry, 48, 237-251.

Swenson, C. H. (1968). Empirical evaluations of Human Figure Drawings. Psychological Bulletin, 70, 20-40.

Timnick, L. (1985, August 25). The Times poll. Los Angeles Times, A.

Thompson, L. V. (1975). Kinetic Family Drawings of adolescents. Dissertation Abstracts International, 36, 3077B-3078B. (University Microfilms No. 75-29, 095)

Thorman, G. (1983). Incestuous families. Springfield, IL: Charles C. Thomas.

Van der Kolk, B. (1989). The compulsion to repeat the trauma: Re-enactment, revictimization, and masochism. Psychiatric Clinics of North America, 12(2), 389-411.

Verdon, M. M. (1987). Comparison of Human Figure Drawings of sexually abused children, physically abused children, and children who have been both sexually and physically abused with drawings of clinical and normal control groups (Doctoral dissertation, Hofstra University). Dissertation Abstracts International, 40/048, 1403.

Vukovich, D. H. (1983). The use of projective assessment by school psychologists. School Psychology Review, 12(3), 358-364.

Walker, C. E., Bonner, E. L., & Kaufman, K. L. (1988). The physically and sexually abused child: Evaluation and treatment. New York: Pergamon.

Wohl, A., & Kaufman, B. (1985). Silent screams and hidden cries. New York: Brunner/Mazel.

Wyatt, G. E., & Powell, G. (Eds.). (1988). Lasting effects of child sexual abuse. Newbury Park, CA: Sage.

Younger, R. D. (1982). Psychopathology and the Kinetic Drawing (Doctoral dissertation, Auburn University, 1982). Dissertation Abstracts International, 43, 3382B.

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