

AN ABSTRACT OF THE THESIS OF

          Maria M. Lammers           for the           Master of Science          

in   Psychology   presented on           November 15, 1996          

Title: Differences on Diagnostic Drawings From Children Who Have Been

Reportedly Sexually Abused and Those Who Have Not

Abstract approved:           Cooper B. Holmes          

Art has been used throughout history to detect human behavior and perception. This thesis explored how the use of a particular projective drawing assessment might indicate the occurrence of sexual abuse in the lives of children ages six to nine. Past research of this type has been used with mostly school-age children who have already learned to read and write in a more advanced stage, such as ages 8 or 9 to 16. These earlier studies found that House-Tree-Person-Modified and Kinetic-Family-Modified drawings would be preferred assessment techniques for children of any age to investigate sexual abuse, because this type of abuse most often occurs in the child's home by someone the child knows. Characteristics from previous research were analyzed in this study according to how they related to the sequence of drawings, Name-Embellishment, House-Tree-Person-Modified, Kinetic-Family-Modified, and Free-Choice-Titled with four different categories, Approach to Drawing Task, Drawing Organization, Drawing Quality, and Drawing Content. Previous research supports the contention that children who have been sexually abused were more likely to draw the same items or characteristics in content. A major discrepancy with the previous data was that blind rater analysis was not used.

Forty children between the ages of six and nine volunteered to be given this

drawing assessment which includes an inquiry section to describe the drawings. The volunteers lived in Missouri and were from local elementary schools and mental health facilities. Twenty children were considered in the experimental group, children who were reported to the Division of Family Services and victims of sexual abuse. The experimental group consisted of 12 males and 8 females. The other 20 children were in the control group, or children who were never reported for sexual abuse. The Control group consisted of 10 males and 10 females. The scores of the control group were compared with those of the experimental group. Both groups were matched according to age and gender.

The statistical procedure used was a  $t$  test to locate differences between the experimental group and the control group in the drawing types and categories. The results indicated no significant differences between these two groups within the Drawing Content category but did find significantly more characteristics for the experimental group when isolating the Kinetic-Family-Drawing-Modified with the categories of Approach to Drawing Task and Drawing Quality and the Free Choice-Titled with the category of Approach to Drawing Task. Because of variability in raters' responses comparisons with past research should be made carefully. A more controlled testing environment, more consistencies between raters, and more homogeneity of subjects within each group is recommended for future research.

DIFFERENCES IN DIAGNOSTIC  
DRAWINGS FROM  
CHILDREN WHO HAVE BEEN REPORTEDLY  
SEXUALLY ABUSED AND THOSE WHO HAVE NOT

---

A Thesis Presented to  
the Division of Psychology and Special Education

EMPORIA STATE UNIVERSITY

---

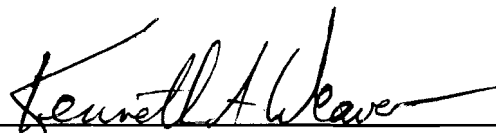
In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

---

by  
Maria M. Lammers

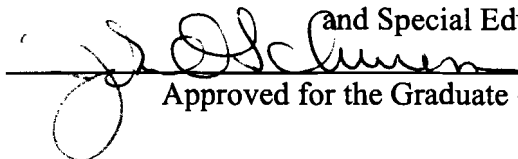
December 1996

10/1/17  
La



---

Approved for the Division of Psychology  
and Special Education



---

Approved for the Graduate Council

## ACKNOWLEDGMENTS

Art is a universal language which requires much conversion to be understood or meaningful in statistical language. Since the world today needs statistics to help others believe in the predictive value of art, this project has been tedious and a labor of love.

I wish to acknowledge my parents who encouraged me every step of the way. I also wish to acknowledge all of the people who walked with me on this journey including my professors Dr. Nancy Knapp, Dr. Cooper Holmes, Dr. Kenneth Weaver, friends, supervisors at work, the statistical wizards, Washington University computer room staff, St. Louis University computer room staff, and the Missouri Division of Family Services.

Last and most importantly, a humble thank you is extended to all the children who volunteered their beautiful art for this study. These children are the reason for much of my hope and perseverance in the field of art therapy.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS.....	iii
CHAPTER 1 - INTRODUCTION.....	1
Literature Review.....	5
CHAPTER 2 - METHOD.....	14
Sample.....	14
Materials.....	14
Drawing Task 1.....	15
Drawing Task 2.....	15
Drawing Task 3.....	16
Drawing Task 4.....	16
Procedure.....	17
CHAPTER 3 - RESULTS.....	21
CHAPTER 4 - DISCUSSION.....	25
REFERENCES.....	30
APPENDIX A: INFORMED CONSENT.....	34
APPENDIX B: SUBJECT’S BILL OF RIGHTS.....	35
APPENDIX C: OPERATIONAL DEFINITIONS.....	36
APPENDIX D: GRAPHIC INDICATOR CHECKLIST.....	43
APPENDIX E: DRAWING ASSESSMENT.....	44

## CHAPTER 1

### INTRODUCTION

Art has been used throughout history as a descriptor of human activity, both conscious and unconscious. Cave dwellers were probably the first to record agricultural, religious, and other cultural activities in their cave paintings. Hammer (1958) traced the use of art to focus on sociopsychological factors to 1855 when Burckhardt analyzed art works of the Italian Renaissance. Burckhardt found very accurate representations of dominant personalities and the sociopsychological tone of that time.

The development of Goodenough's (1926) Draw-A-Person (DAP) technique marked the beginning of using formal drawing in clinical settings. A standardized scoring method was employed for determining the intelligence of both children and adults. As this test was revised, more emphasis began to be "placed on the child's accuracy of observation and on the development of conceptual thinking, rather than on artistic skill" (Anastasi, 1988, p. 304). Variations of this drawing technique have evolved with time to include: House-Tree-Person (Blain, Bergner, Lewis, & Goldstein, 1981), Kinetic Family Drawing Test (Burns & Kaufman, 1970), and the Silver Drawing Test (Silver & Lewin, 1977).

Similarities have been found between the art of the genius and the art of the mentally ill; similarities have also been found between that of primitive cultures and children (Machover, 1949). Originally the Draw-A-Person technique was used as a measure of intelligence but became a source of personality assessment; therefore, the DAP became incorporated as a routine clinical procedure for children and people of all

ages (Machover, 1949). This use of drawings in the clinical setting emerged when clinicians found as much information about a person's personality from drawings as from development.

Hammer (1958) found that basing interpretive deductions on isolated bits of data from drawings was too narrow in scope. Based on the single drawings from subjects collected by Hammer, the interpretation of one drawing should be checked against other information such as other drawings, an entire projective battery, a case history, and any available information about the subject. In 1987, the Handbook of Psychological Signs, Symptoms, and Syndromes was published as a means of giving the clinician a list of correlated findings in projective techniques paired with clinical diagnoses (Ogden, 1987). Post-traumatic stress disorder or sexual abuse were not listed as categories in this handbook but the findings listed under the anxiety disorders and depression section are consistent with the findings in child sexual abuse research.

The use of art within the psychological realm has also expanded to become a choice of treatment modality. Art therapy became a separate branch of the American Psychological Association (APA) and became known as the American Art Therapy Association (A.A.T.A.) in 1968. The basic psychotherapeutic theories were incorporated in the art-making process. Psychoanalytic theory (Kramer, 1971), which is primarily the analysis of symbols in art connected with the unconscious process, and Psychoeducational theory (Naumberg, 1973), which is the analysis of art according to mental development, were the first two types of art therapy and focused mainly on art as a means of communicating with children. Every aspect of therapy including assessment



was derived from interpretation of the art as a product, a process, and a reflection of the person.

Hammer (1958) pointed out that people will create art in their own image as an extension or projection of self which tends to give a distorted and subjective view of the world. No projective technique can fully differentiate abnormality from normality without reference to time, place and circumstances which might bear upon the value judgments that are derived from the test (Machover, 1949). Only the prominent aspects of the subject's world will be presented to the clinician thus giving a partial view of the subject's world. The clinician must see the differences between the subject's condition and experiences (i.e., if a child claims to be an orphan when in actuality both parents are alive and active in the child's treatment).

Choosing a projective drawing technique can determine the amount of useful information gleaned. Some drawing tests are more useful than others due to consistent administration, construct validity, and predictive validity. Anastasi (1988) stated the guide for interpreting the Draw-A-Person test gives many broad generalizations. She suggested that in order to increase predictive validity in the Draw-A-Person, House-Tree-Person and other projective drawing tests, cross-validation studies with blind rater analysis should be conducted. Although the original procedure remains for administering Machover's DAP (1949), in which a drawing of a person, a drawing of the opposite sex based upon the first drawing and a self portrait with immediate verbal description are gathered, clinician's can easily personalize the questioning if it is not taken from a manual or guide sheet. Machover (1949) suggested data be collected and

presented systematically and should accompany the published report of the test.

As indicated previously, projective drawing tests are problematic due to their idiosyncratic nature. Global assessment of the person's condition has not been proven to any one test or aspect. Art, therefore, cannot be used alone in personality or mental assessment. The examiner has limited information from the person's art to describe the whole person. Important surrounding environmental information has been lost if no other data have been collected.

Although these problems have existed in using art as a clinical assessment, art has remained one of the most valuable ways in gathering self-report material from those who are lacking in verbal skills and verbal expression, especially children (Kellogg, 1970). Kellogg examined approximately a million drawings done by children and believed children's art is a language of thought that changes with development.

While sexual abuse of children is not a new phenomenon, its investigation has recently grown to be a major concern in the mental health welfare of children. Experimental studies have been generally impossible because abuse cannot be allowed just to be studied. Most studies are retrospective due to many ethical issues. Sexual abuse cannot be inflicted for the purpose of study, but actual cases of abuse are reported and investigated much later than the first incident. One major issue is patient rights that require the investigator to have access to their cases (Walker, Bonner, & Kaufman, 1988). The effects of undetected, untreated childhood sexual abuse have mostly been related to symptoms of adult depression and suicide attempts, but also include anxiety, phobic reactions, guilt, substance abuse, difficulty trusting both men and women resulting in

poor marital and interpersonal relationships, low self-esteem, extreme passivity and episodes of dissociation or derealization (Walker et al).

The child may very likely repeat the abuse received in a cyclical syndrome (Case & Dalley, 1990; Summitt, 1983).

Sexual abuse has been categorized as a psychological trauma in Johnson's (1987) study of the role of the creative arts therapies in the diagnosis and treatment of psychological trauma. This descriptive paper looked at the effects of psychological traumas in diagnosis and treatment. Johnson found that victims of a psychological trauma were misdiagnosed because the victim was initially using many defenses to block out the trauma (1987). Johnson proposed that assessment procedures which are non-threatening, unobtrusive, and allow for expression have been most helpful to allow the subject manage the trauma. As a projective measure in clinical assessment of sexually abused children, human figure drawings have not only allowed expert clinicians to assess intellectual and cognitive capabilities, but also have allowed for psychometric analysis of personality in a structured, non-threatening and expressive manner (Miller, Veltkamp, & Darcy, 1987).

## LITERATURE REVIEW

Stages of artistic development have been linked to Piaget's theory of psychosocial development. He has described the growth of a child beginning from a self-focused activity to a gradual extension of self into the surrounding environment. Drawings have been recorded to progress from scribbling stages (random, controlled, and named) at 2 to 4 years, preschematic (early human figure representation) at 4 to 7 years, schematic

(repeated individual style of figure representation) at 7 to 9 years, and a gang age stage (dawning realism or pseudonaturalistic) at 9 to 12 years (Lowenfeld & Brittain, 1987). The works of both Lowenfeld & Brittain (1987) and Kellogg (1970) have developed an average drawing ability of each age category that can be used to compare children of various emotional and mental impairments.

Of particular interest are the differences of drawings between a normal or non-afflicted group of children and a group of children who have been reported as having been sexually abused between the ages of six and nine. According to Lowenfeld's theory (Lowenfeld & Brittain, 1987), this age group falls between the preschematic and gang age stages.

Blain, Bergner, Lewis, and Goldstein (1981) compared drawings of a normal or nonafflicted group of children with children who were being treated in a psychiatric facility for child abuse, sexual abuse, or some illness not related to abuse. This study incorporated a systematic approach for the collection of House-Tree-Person drawings from 109 children between the ages of 5 and 12. The children were divided into one of three conditions: a clinical group assessed by their therapists and suspected to be abused; a clinical group assessed by their therapists and suspected to be non-abused; and a normal group assessed by elementary school teachers to be exceptionally well adjusted and unlikely to have abuse present in the home. Six significant items were found to occur more often in the abused-clinical group than in the other two groups: smoke present from the chimney of the house, absence of windows from the ground floor of the house, noticeable differences in the size of legs or arms of the person, the absence of feet,

disproportion in the size of the head of the person, and the figure is comprised of geometric figures. The results suggested the greatest difference was in the presence of items between the clinical-abused group and the normal group.

Another study used children's drawings taken from a hospital setting as indicators of sexual trauma (Burgess, McCausland, & Wolbert, 1981). Children brought in for treatment of physical injuries of sexual assault were also treated for psychological injuries. Nurses had the children draw pictures of what happened to them, a picture of themselves, and a picture of their homes. These drawings were used as an indicator of ego functioning, used as a therapeutic intervention to describe psychological dynamics, as a measurement of social status, and in criminal prosecution involving children as witnesses. The drawings obtained included features of disorganized representation of self in figure drawings, verbally defined representations of male and female genitalia, and an emphasis on specific details of the abuse setting (Burgess et al).

The cases in the previous study were investigated and recognized as sexual abuse because the children had taken the initiative to help break the silence of abuse. Classical incest has been more complicated to pinpoint. The victim of classical incest has more pressure from the relative, who is the perpetrator, to remain silent; therefore, the incest victim is less likely to stop the abuse by reporting the incest. Even if the child does, in fact, perceive the sexual interaction as abuse, speaking out about the abuse may not occur until the child is far removed from the perpetrator's persuasions and control (Faller, 1988). On a continuum of abuse, the closer the case is to classical incest, with progressively intrusive sexual behavior between father and daughter, the more difficult it

is to uncover while the abuse is still occurring (Faller).

However, "When a child makes an outcry about incest it is usually true" (Cohen & Phelps, 1985, p. 266) and the younger the child was when the claim was made the more positive the chances of intervention. Cohen and Phelps (1985) gathered drawings (H-T-P, a drawing of the family engaged in some activity, and a Free Choice drawing) from 166 children ages 4 to 18 being seen in a family clinic. The children were divided into two groups according to their initial diagnosis: one group had been seen for treatment of sexual abuse while the other group had been seen for an emotional disturbance other than sexual abuse. The features defined in this study to be rated were a red house, one window only, one window differed from scheme of windows, a phallic tree, a phallic chimney, a face colored in, a person enclosed or hidden, obvious violent content, absence of color, a missing house (H-T-P only), child missing (family drawing only) and absence of drawing (family only). When rated by trained research staff, who were blind to the hypotheses of the study, significantly more of these features were found in the abused group drawings. The abused group had an average of 2.72 features present in their drawings while the nonabused had an average of 1.81 and 0.80 (Cohen & Phelps, 1985). Since this study compared only children being treated by a clinic, the results were limited in generalizability to children who never have been hospitalized or treated for mental health.

Sidun and Rosenthal (1987) compared Draw-A-Person drawings from adolescents between the ages of 13 and 17 who were hospitalized for sexual abuse and those who were hospitalized for other disorders. This study was archival and the drawing collection

spanned from 1975 to 1985 from the clinic's files. There were disproportionately more females than males treated for sexual abuse, 44 and 16 respectively. Groups were matched for sex as well as age, IQ, diagnostic category and race. The graphic indicators that occurred more often in the experimental group than in the control group were hands omitted, fingers omitted, more wedges (triangular shapes), phallic-like objects, circles, heavier and more uneven line pressure, and figures with only a head and no body (Sidun & Rosenthal, 1987). These researchers generated many suggestions for future work in this area (e.g., change in collection of the drawings, repeated study of a single group of adolescents over time).

By recruiting children, ages three to seven to complete a drawing task of two Draw-A-Person pictures and a Human Figure completion task, Hibbard, Roghmann, and Hoekelman (1987) gathered a greater variety of children than the previous studies concerning graphic indicators of sexual abuse. The parents of the comparison group were asked to give informed consent before their children entered the study, but this was not asked of the parents of the allegedly sexually abused group as they were under custody of the state of New York. Drawings from 104 children were scored by raters who were blind to the child's group identification. Five body parts: eyes, navel, vulva/vagina, penis and anus were scored as present, absent or unsure with a 94% agreement among the evaluators. The results yielded an estimated relative risk that an alleged sexual abuse victim was 5.4 times more likely to draw genitalia than was a comparison child and was 6.8 times more likely if the abuse was substantiated while only 3.0 times more likely if the abuse was unsubstantiated. These data may indicate that children who are being

treated for a mental illness could be predisposed to abuse (sexual, emotional, and/or physical). An interesting finding was that of all the children who drew genitalia, the alleged sexual abuse victim drew phallus while the comparison child drew a circle to represent the penis. These were a few indications that a sexually abused child was more likely to draw genitalia and with more detail than a comparison child. In the few instances in which follow-up drawings were available for review from the sexually abused children the presence of genitalia in the drawings persisted.

Genitalia in the drawings of sexually abused children has also been noted in other studies as a consistent indication of sexual abuse (Briggs & Lehmann, 1989; Riordan & Verdel, 1991). Briggs and Lehmann (1989) suggested that other signs found in the drawings of Australian school children who were later discovered to be sexually abused could be used as warning signs of sexual abuse for any child. They proposed the lack of a mouth might mean the child was sworn to secrecy by the abuser or the mouth may have actually been the site of abuse. The lack of arms or limbs might indicate the child's feelings of inadequacy, ineffectiveness, and helplessness towards the abuse (Briggs & Lehmann, 1989; Riordan & Verdel, 1991). Briggs and Lehmann (1989) commented on the idea that "normal, happy, well-adjusted children may include 'belly-buttons' on their drawings but children only include genitals when they have reason to be concerned about these parts of the body" (p. 132). If the child has been exposed to pornography he/she is likely to be at serious risk of abuse (Briggs & Lehmann, 1989). Riordan and Verdel (1991) discovered that sexually abused children continued to draw genitalia outside the confines of the human figure according to the child's verbal confirmation.



The use of the Kinetic Family Drawing, developed by Burns and Kaufman (1970), has been used to examine sexual abuse within an incestuous family dynamic (Hackbarth, Murphy, & McQuary, 1991). These drawings were rated according to the Like to Live in Family procedure (Burns, 1982) which has a 5-point interval scale ranging from 0 to 4 regarding projection of desirable family life; the higher the score projects a more positive family life. Drawings were collected from two groups of children who were either identified as sexually abused or not and their mothers. The sexually abused children had a mean score of 1.30 while their mothers had a mean score of 1.88. The nonabused children scored a mean of 2.11 and their mothers scored a mean of 2.42. The scores between groups showed a significant difference in the perception of family by the children and their mothers who were from an incestuous family. They consistently scored lower on the Like to Live in Family showing that mothers' perceptions of the family were consistent with the negative aspect of family life the children had.

Drawings may empower the victim by giving them a concrete, external representation of the abuser and the abused. Corder, Haizlip, and DeBoer (1990) found that using art as a means to build defense mechanisms and master the abuse is an effective means of therapy for children. Many art therapists have already shown children and sexual abuse victims that art can become a shield against any further harm (Landgarten, 1987; Case & Dalley, 1990). Corder, Haizlip, and DeBoer investigated the use of a time-limited group therapy for sexually abused pre-adolescent children. The group focused on changes that would help the children avoid future victimization through teaching problem-solving skills, intellectual understanding of abuse, building self-esteem,

and training them in seeking help from others in the environment. They found the children's symptoms of abuse decreased after the therapy (fewer sleep disturbances, more compliance at home and school in some areas, and more assertive verbalization at appropriate times) as reported by parents, teachers, and social workers. Because the observations of improved symptoms was in anecdotal form, future research was suggested to include more objective pre and post testing. If the initial assessment mimicked the stages of therapy then the drawing assessment would act as two valuable activities, assessing the exact nature of sexual abuse and providing an opportunity for the victim to externalize the pain in a structured and safe environment.

Knapp (1989) proposed a drawing battery "based upon the most apparently useful parts of traditional drawing techniques and related research" (p. 94). Alzheimer's patients were studied for their change of abilities resulting from their organicity. Eighty-four drawing protocols were administered to control individuals versus Alzheimer's patients of randomly assigned equal group sizes. The order and use of techniques administered was: Name Embellishment (NE), a modification of the House-Tree-Person (HTPM), a modification of the Kinetic Family Drawing (KFDM), and a Free Choice, Titled (FC-T). The drawings were rated by three trained raters with 93% agreement. The results of this study gave many significant correlations including the one which supported Knapp's main hypothesis that deterioration of drawings would occur with Alzheimer's patients.

Knapp's (1989) method can be modified to other populations of interest such as sexually abused children because it examines the basic aspects of drawing, by adding or deleting checklist items which are consistent with the previous research of drawings of

sexually abused subjects. This premise rests upon the research that says drawings have been universally effective with lower functioning and less verbal subjects. The hypothesis to be tested is that differences in content of drawings will occur between groups when using the drawing battery proposed by Knapp with children ages 6 to 9 who are in one of two categories, a group of reportedly sexually abused children and a group of children who have been considered well adjusted in school and at home. Because the items in the content section of the checklist have been derived from research of sexually abused children, the experimental group will probably have a higher score in the content section. The sexually abused group will have been identified by a mental health center and will have given consent by the mental health center for testing. The control group will be recruited from schools near the mental health center and will have never been reported or treated for any psychological symptoms. The subjects and the legal guardians of both the experimental group and the control group will have given informed consent before their children will be tested.

## CHAPTER 2

### METHOD

#### Sample

Two groups of children were recruited from metropolitan eastern Missouri. The first group, or the experimental group, consisted of 20 subjects, 10 male and 10 female, ranging from ages 6 to 9 years who were admitted to a mental health facility for treatment of sexual abuse that occurred 3 to 18 months prior to treatment. This mental health facility was a non-profit hospital that took all types of cases including government-funded, private-funded, and charity. The second group, or the control group, consisted of 20 subjects, 10 male and 10 female, ages 6 to 9 who never reported or were never treated for mental health or sexual abuse. The control group was recruited from local elementary schools. Each child was assigned a number for confidentiality purposes. The children were matched according to age, gender, and socioeconomic status. Those children receiving Medicaid and/or a free lunch were considered low socioeconomic status, and any other type of medical insurance and no free lunch were considered high socioeconomic status.

#### Materials

The projective drawing techniques in this study were originally chosen by Knapp (1989) for her doctoral dissertation regarding Alzheimer's patients. This battery of drawings was chosen due to its inclusive nature which incorporated the drawing assessments found in the literature of related research. Each of the techniques offered different information. These techniques are: Name Embellishment (NE); a modification

of the House-Tree-Person (H-P-T-M); a modification of the Kinetic Family Drawing (K-F-D-M); and a Free Choice, Titled (FC-T).

### Drawing Task 1

The first drawing in a series was regarded as the way a person initially presents himself or herself. The first drawing involved a number of functions such as a gradual entry, orientation, getting acquainted, and becoming as comfortable as possible with the test situation. The instructions for Name Embellishment (NE) were "Begin with your name, nickname, or initials and decorate it or make it into a picture which says whatever you want to say about yourself." Because the children were all school age, they were able to write their own names. This gave them a non-threatening task that showed personal content. Even though this task was somewhat structured, it was still less structured than those assessment techniques that require an individual to copy specific shapes. The results may score as abstract, symbolic or concrete.

### Drawing Task 2

The second drawing task was a modified House-Tree-Person (H-T-P-M) with instructions to "Draw a picture any way you want, but include a house, a tree and a person" all on one page. The original House-Tree-Person assessment had the instructions to draw a house, a tree, and a person on different pieces of paper. Hammer recognized the symbolic and emotional strength of these associations in the development of the personality (1958). Traditionally, the house was seen as the site of interpersonal relationships, a tree as a representation of self concept in the general environment and, of course, a drawing of a person is associated with body image in clinical assessments. The

reason all three elements were included on one page was to show the child's ideas of organization and relationship.

### Drawing Task 3

The third drawing was a modification of the Kinetic Family Drawing (K-F-D-M) with the instructions, "Draw a picture of your family doing something together ...define family anyway you want." This was a variation of the original Kinetic Family Drawing proposed by Burns and Kaufman (1970) because the wording in the directive and different procedures incorporated broader responses from children to define family "anyway you want." Because the family definition gave the child more choices, stick figures, cartoon figures, abstract symbols or even colors may represent members. This drawing task showed a slice of the subject's perception of other people in his or her life and how they all interrelate. Inclusions, exclusions, emphasis minimization, relative sizes and positions of different people depicted were among the factors evaluated.

### Drawing Task 4

Drawing number 4 was a free choice with a title (FC-T) in which the subject was requested to "Draw anything and give it a title." This task allowed the child the opportunity to spontaneously share something new that had not been brought to the surface. Whether the title was relevant or irrelevant to the picture, it may have provided pertinent information.

Before the drawing procedures were administered, all subject's parents or legal guardians and the child participating signed the Human Subject's Consent Form and were given a copy of Experimental Subject's Bill of Rights. The parents of the control

group received a general description that their child was part of the peer or developmental norm group that was compared to a group of children who had been admitted to therapy for sexual abuse.

### Procedure

Before testing began, consent forms from subjects and their parents or legal guardians were obtained. Permission from the Department of Family Services in the state of Missouri was obtained to collect drawings from children under their investigation for sexual abuse in two St. Louis hospitals. Two elementary schools in the city of St. Louis also gave permission for this examiner to collect drawings from children. The examiner administered the drawing tasks to each child while sitting to the side of the child. The examiner read the instructions to the child from a data sheet that included space for observations and answers to an inquiry of each drawing. The inquiry occurred immediately following the complete drawing battery. All verbalizations, choice of material, preferred drawing, approach to materials, erasures, and length of time for each drawing were recorded on these data sheets.

The child was given a 8.5 x 11 inch white sheet of paper for drawing. As each drawing was completed the examiner turned that drawing over and placed it to the side nearest the examiner before giving the child the next piece of paper. After the child completed each drawing the examiner encouraged the child with statements such as, "You are doing a great job," "I like the way you are concentrating," or "Keep up the good work." All sheets of paper were handed to the child in a vertical orientation. The examiner inquired about the drawings in the same order the pictures were drawn using the

questions on the data sheet (see appendix). The child was given the choice of pen, pencil including an eraser, pastels, fine markers, and thick markers. The choice of colors included black, white, brown, violet, blue, green, yellow, orange, red and pink.

When the drawings were completed, each child was allowed to ask questions. If a child asked questions during the task, the examiner said, "I will answer any questions you have after you have completed these drawings." If a subject appeared to have difficulty drawing or completing the tasks due to some distress, the examiner asked the child "Would you like to take a break?" or say "Sometimes drawing is very difficult, you are working very hard," or "Would you like to stop for a while and play or just talk?" If the child verbally asked to stop the procedure completely then the examiner allowed child to stop the procedure completely.

The rating scale for these drawings was the same as used by Knapp (1989) in a study of the deterioration of drawings from Alzheimer's patients. Ninety-three percent inter-rater reliability was established in Knapp's (1989) study. This scale included characteristics in a checklist format that described the subject's Approach to the Drawing Task, the Drawing Organization, the Drawing Quality, and the Content of the Drawing of each drawing. The specific characteristics rated can be found in Appendix D. The characteristics in the Approach to Drawing Task section measured how the child approached this task, for instance did the child quickly begin drawing what the examiner asked or did the child resist the task by asking questions or drawing something unrelated to the directive. The characteristics in the Drawing Organization Section measured how the child actually arranged the elements of the drawing including spatial orientation of



the page, what perspective the child used, and emphasis of different aspects of the drawing. The characteristics of the Drawing Quality section measured how the child used detail, line, form, and shapes to express his or her response to the directive. The Drawing Content section measured the presence of specific elements found in previous research of children who had been sexually abused. The content section was changed to contain content descriptions derived from previous literature on children's drawings of sexual abuse. This change may affect the reliability originally established (Knapp, 1989).

In order to achieve 80-90% inter-rater reliability with these checklists, the examiner trained three raters to examine the drawings in accordance to the checklist using a sample set of drawings. The raters were all female with at least a Bachelor's degree. One of the raters was a graduate student studying art therapy and seemed to disagree most in the rating of these drawings. The other two raters worked with children on a daily basis, one as a nanny and the other as an elementary art teacher. The raters were given operational definitions corresponding to the checklist based upon the operational definitions of Knapp's (1989) dissertation and those found in the related research. They were each given sample drawings to score. When a range of 80-90% inter-rater reliability was met with the sample drawings then the experimental drawings were rated. An example of the data sheets and checklists are included in the appendices. The raters were given a checklist with operational definitions for each item to be checked as present, or left blank as not present. The checklist was divided into the four categories described previously, Approach to Drawing Task, Drawing Organization, Drawing Quality, and Drawing Content. The checks were tallied for each category and then added as a total

composite score; therefore five scores were obtained. The predicted outcome of the results was for the Drawing Content score of the experimental group (or the reportedly sexually abused group) to be larger than the Drawing Content score of the control group (or not reportedly sexually abused group). The Drawing Content was predicted to have significant results because previous research was based upon the content of sexually abused children's drawings. Scores were analyzed according to 16  $t$  tests for each drawing category and each drawing type.

## CHAPTER 3

### RESULTS

A drawing assessment including four drawings, Name-Embellishment, House-Tree-Person-Modified, Kinetic-Family-Drawing-Modified, and Free-Choice-Titled was administered to 40 children between the ages of 6 and 9. Twenty children were in the experimental group who had been reported to the Division of Family Services as victims of sexual abuse and 20 children were in the control group who had never been reported for sexual abuse. Two raters who were blind to the condition of the subjects and who had a 90% reliability score on the sample drawings examined a total of 160 drawings from the 40 children. The raters checked for the presence of 45 possible characteristics within each drawing and according to the inquiry attached to each drawing. The 45 possible characteristics were divided into four categories including Approach to Drawing Task, Drawing Organization, Drawing Quality, and Drawing Content. These four factors were examined within each of the four drawings, Name-Embellishment, House-Tree-Person-Modified, Kinetic-Family-Drawing-Modified, and Free-Choice-Titled. The obtained mean frequencies were compared between the experimental group and the control group.

Each drawing was considered according to the sum of characteristics checked in each category and drawing type using a two-tailed  $t$  test with an alpha level of .05. The independent variable was group, either control or experimental, and the dependent variable was the drawing category according to the four drawing types.

The scores of each rater were computed separately. There was a 90% reliability of scores between raters when initially trained to examine the drawings. Two of the three

raters, who were initially trained in agreement 90% of the time, actually scored all 160 drawings. At the end of their analysis they had 82.5-98.7 % range of reliability based upon a random sample reliability test ( $n = 40$ ) of the following checklist items: 1) confused response, 2) impulsive response, 3) derailing from goal, 4) destruction of material, 5) distorted proportion, 6) worm's eye view, 7) dominance R L T B, 8) incongruity, 9) flattened shapes, 10) lack of shapes/form, 11) apparently aimless lines, 12) shaky lines, 13) bizarre/violent content, 14) smoke present form chimney, 15) red house, and 16) sexual content inappropriate to age. The scores of each rater were computed separately. When these two raters disagreed on particular drawings, the third rater checked for the presence of characteristics as a tie breaker. When two out of three raters agreed on the presence of a characteristic it was scored for all 160 drawings. All other checked characteristics were not counted until one set of scores was achieved.

Table 1 displays the means, standard deviations,  $t$  values, and  $p$  values for each drawing task according to each category. Abbreviations of the categories and drawings as listed in the table are as follows: A - Approach to Drawing Task, B - Drawing Organization, C - Drawing Quality, D - Drawing Content, NE - Name Embellishment, HTPM - House-Tree-Person-Modified, KFDM - Kinetic-Family-Drawing-Modified, and FC-T - Free Choice-Titled. The experimental and control groups had an equal  $n = 20$ , therefore, each two-tailed  $t$  test had  $df = 38$  with  $p$  value significant when  $< .05$ .

There were 3 significant  $t$  tests in all 16. The results for the Approach to Drawing characteristics in the Kinetic Family Drawing Modified drawing were  $t(38) = 2.12$ ,  $p < .05$  with the reportedly sexually abused participants ( $M = .55$ ) scoring higher than the

Table 1

Means and Standard Deviation Scores with t values and p valuesfrom Drawing Categories and Drawing Types

Category & Drawing Type	Reportedly Abused		Control		t
	M	SD	M	SD	
ANE	.45	.83	.25	.44	.95
AHTPM	.30	.66	.40	.50	-.54
AKFDM	.55	.76	.15	.37	2.12*
AFCT	.55	.69	.15	.37	2.30*
BNE	.10	.31	.00	.00	1.45
BHTPM	.25	.55	.05	.22	1.51
BKFDM	.35	.59	.20	.41	.94
BFCT	--	--	--	--	--
CNE	.00	.00	.15	.49	-1.37
CHTPM	.55	1.05	.10	.31	1.84
CKFDM	.55	.89	.05	.22	2.44*
CFCT	.20	.52	.15	.49	.31
DNE	.60	.75	.70	.57	-.47
DHTPM	1.30	1.13	1.30	.87	.00
DKFDM	.95	.69	1.05	.69	-.46
DFCT	.50	.61	.65	.67	-.74

\*  $p < .05$ , -- no characteristics were present to evaluate with the t test

control participants ( $\underline{M} = .15$ ). The results for the Approach to Drawing Task characteristics in the Free Choice Titled drawing were  $t(38) = 2.30, p < .05$  with the reportedly sexually abused participants ( $\underline{M} = 0.55$ ) scoring higher than the control ( $\underline{M} = 0.15$ ) participants. The results for the Drawing Quality characteristics in the Kinetic Family Drawing Modified drawing were  $t(38) = 2.44, p < .05$  with the reportedly sexually abused participants ( $\underline{M} = 0.55$ ) scoring higher than the control participants ( $\underline{M} = 0.05$ ).

## CHAPTER 4

### DISCUSSION

This study hypothesized that the Drawing Content score of the experimental group (or reportedly sexually abused group) would be higher for all four drawing types than the Drawing Content score of the control group (or those not reported for sexual abuse). The content of drawings from previous research was found to be the critical indicator of the presence of sexual abuse but none of these studies addressed the early school age group between the ages of 6 and 9 in a drawing assessment of four drawings with an inquiry to these drawings and identifying the presence of sexual abuse indicators by raters blind to the condition of the subject. Although there were no significant findings in this study related to the Drawing Content there were significant findings in the areas of Approach to Drawing Task and Drawing Quality with the Kinetic-Family-Drawing-Modified drawing type and Approach to Drawing Task with the Free Choice-Titled drawing showing more indicators present for the experimental group than for the control group.

It is difficult to explain why there were no significant results related to the Drawing Content since previous research is mainly based upon the analysis of Drawing Content (Blain, Bergner, Lewis, & Goldstein, 1981; Briggs & Lehman, 1989; Cohen & Phelps, 1985; Hibbard, Roghmann & Hoekelman, 1987; Riordan & Verdel, 1991). Perhaps there were too many characteristics within the Content category for a significant difference between groups to be found. Some of the characteristics may have been close in definition to characteristics in other categories (i.e., overemphasis of details and

perseveration of line or form or minimal response and lack in content) and therefore the raters chose one characteristic on the checklist rather than analyzing the differences further. Further research could analyze those Content characteristics to find the ones consistently different.

Rater 1 and Rater 2 checked significantly more characteristics as indicators of sexual abuse for the experimental group than the control group under the category of Approach to Drawing Task with the Kinetic-Family-Drawing-Modified drawing. There are 11 possible characteristics within this category that could be analyzed further: Lag time, Inappropriate to task, Refusal of specific tasks, Abstract response, Concrete response, Confused response, Excessive response, Impulsive response, Minimal response, Derailing from goal and Destruction of material. Investigation of the occurrence of any one of the above characteristics or the 45 possible characteristics could still be analyzed individually with the remaining data. The children who were reported for sexual abuse may have more difficulty in approaching the task of drawing a picture of themselves within a family setting than those children who were not reported for sexual abuse. Another interpretation may be that the experimental group had anxiety about their family because they were all removed from a family setting during the time of this assessment and were living in a mental health facility while the control group members were living within a family setting.

Another area found to have significantly more indicators for the experimental group than the control group was Drawing Quality within the Kinetic-Family-Drawing-Modified drawing. There are 10 characteristics in the Drawing Quality category that



could be analyzed further: Ambiguous shapes, Flattened shapes, Lack of shapes/form, Apparently aimless lines, Gaps between lines, Overlapping lines, Perseveration of line/form, Reinforced lines, Shaky lines, Unintelligible essentials. These quality characteristics may be affected because the abused child will draw very little to represent a family or will have difficulty concentrating on the precision of the drawing or will persevere on the physical aspect of the drawing.

Again, there were significantly more characteristics checked for the experimental group than the control group for the Free Choice-Titled drawing in the Approach to Drawing Task category. There are 11 characteristics within this category that could be analyzed further as was previously mentioned with the Approach to Drawing Task and the Kinetic Family Drawing Modified. These results may have been significantly different because the previous drawing was the Kinetic Family Drawing Modified and the children who were in the experimental (reportedly sexually abused) group may have still been anxious from their difficulty in drawing a family doing something together. These children may have needed a more specific, structured, safe task after the family drawing to begin drawing with confidence and without hesitation. Because there were two significant results within the Kinetic Family Drawing Modified drawing and only one within the Free Choice-Titled drawing it seems that significant results were found in this test due to some relationship to the previous family drawing.

Undoubtedly, there is a pattern for more characteristics in the Kinetic Family Drawing Modified drawings of the reportedly sexually abused children. This may suggest that a child who has been reported for sexual abuse may hesitate, refuse, or in

some way have difficulty conceptualizing and drawing himself/herself within a family context. Many cases of child sexual abuse occur incestuously (Cohen & Phelps, 1985). The family drawing is likely to be the key drawing to investigate for any of the 45 characteristics in this study, especially those pertaining to the artist's approach and the art quality (Hackbarth, Murphy, & McQuary, 1991). The Kinetic Family Drawing Modified was part of a series of drawings to insure raters would have a sample of drawings from the same child to note differences or similarities in schema or such areas as approach. The order of drawings was chosen to allow the child to become increasingly more comfortable with drawing a picture of a family which was previously found more difficult for a reportedly sexually abused child to perceive in the Burns (1982) study which focused on differences of family perception of children who have been abused and children who have not been abused.

The subjects of this study were all administered the drawing battery by the same examiner. This allowed for the greatest consistency in assessment procedure but may have been more controlled if the examiner had been blind to the nature of this study. Other factors that may be more controlled in further replication of the assessment administration would be the use of the same room, use of a stop watch to increase accuracy of the time spent on the various sections of the assessment, a larger sample size, a larger cross-section of subjects culturally and socioeconomically (especially the control group), control for homogeneity of variance within the experimental and control groups more, and use of three raters throughout the entire study and then choose the best two out of three from the final results as did Cohen and Phelps (1985). Homogeneity of variance

## REFERENCES

- Anastasi, A. (1988). Psychological testing (6th ed.). New York: Macmillan.
- Blain, G. H., Bergner, R. M., Lewis, M. L., & Goldstein, M. A. (1981). The use of objectively scorable house-tree-person indicators to establish child abuse. Journal of Clinical Psychology, 37, 667-672.
- Briggs, F., & Lehmann, K. (1989). Significance of children's drawings in cases of sexual abuse. Early Child Development and Care, 47, 131-147.
- Burgess, A. W., McCausland, M. P., & Wolbert, W. A. (1981). Children's drawings as indicators of sexual trauma. Perspectives in Psychiatric Care, 19, 50-58.
- Burns, R. (1982). Self-Growth in families. New York: Brunner/Mazel.
- Burns, R., & Kaufman, S. H. (1970). Kinetic Family Drawings (K-F-D). New York : Brunner/Mazel.
- Case, C., & Dalley, T. (1990). Working with children in art therapy. New York: Tavistock/Routledge.
- Cohen, F. W., & Phelps, R. E. (1985). Incest markers in children's artwork. The Arts in Psychotherapy, 12, 265-283.
- Corder, B. F., Haizlip, T., & DeBoer, P. (1990). A pilot study for a structured, time-limited therapy group for sexually abused pre-adolescent children. Child Abuse & Neglect, 14, 243-251.

Faller, K. C. (1988). Child sexual abuse: An interdisciplinary manual for diagnosis, case management, and treatment. New York: Columbia University Press.

Goodenough, F. L. (1926). Measuring of intelligence by drawings. New York: Harcourt, Brace, & World.

Hackbarth, S. G., Murphy, H. D., & McQuary, J. P. (1991). Identifying sexually abused children by using kinetic family drawings. Elementary School Guidance & Counseling, 25, 225-260.

Hammer, E. F. (1958). The clinical application of projective drawings. Springfield, IL: Charles C Thomas.

Hibbard, R. A., Roghmann, K., & Hoekelman, R. A. (1987). Genitalia in children's drawings: An association with sexual abuse. Pediatrics, 79, 129-137.

Johnson, D. R. (1987). The role of creative arts therapies in the diagnosis and treatment of psychological trauma. The Arts in Psychotherapy, 14, 7-13.

Kellogg, R. (1970). Analyzing children's art. Palo Alto, CA: National Press Books.

Knapp, N. (1989). A comparison of diagnostic drawings from normal and Alzheimer's subjects. (Doctoral Dissertation, United States International University, 1989). Dissertation Abstracts International, 51, 432B.

Kramer, E. (1971). Art as therapy with children. New York: Schocken Books.

- Landgarten, H. B. (1987). Family art psychotherapy: a clinical guide and casebook. Albany, NY: Brunner/Mazel.
- Lowenfeld, V., & Brittain, W. L. (1987). Creative and mental growth. New York: Macmillan.
- Machover, K. (1949). Personality projection in the drawing of the human figure. Springfield, IL: Charles C Thomas.
- Miller, T. W., Veltkamp, L. J., & Janson, D. (1987). Projective measures in clinical evaluation of sexually abused children. Child a Psychiatry and Human Development, 20, 123-133.
- Naumberg, M. (1973). An introduction to art therapy. New York, NY: Teachers College Press.
- Ogden, D. P. (1987). Handbook of psychological symptoms and syndromes. Los Angeles, CA: Western Psychological Services.
- Riordan, R. J., & Verdel, A. C. (1991). Evidence of sexual abuse in children's art products. The School Counselor, 39, 116-121.
- Sidun, N. M., & Rosenthal, R. H. (1987). Graphic indicators of sexual abuse in Draw-A-Person tests of psychiatrically hospitalized adolescents. The Arts in Psychotherapy, 14, 25-33.
- Silver, R., & Lewin, C. (1977). The role of art in developing and evaluating cognitive skills. Journal of Learning Disabilities, 10, 416-424.
- Summit, R. C. (1983). The child sexual abuse accommodation syndrome. Child Abuse & Neglect, 7, 177-193.

Walker, C. E., Bonner, B. L., & Kaufman, K. L. (1988). The physically and sexually abused child evaluation and treatment. New York: Pergamon Press.

## APPENDIX B

## EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

1. I have the right to share only what I am comfortable sharing.
2. I have the choice/right to participate because I want to do so and not because I am told to do so.
3. I have the right to be myself and realize that there is no right or wrong way to complete this test.
4. If for any reason I feel that I can't or don't want to complete this test, I have the right to stop without any questions.
5. I have the right to ask any questions about this test that I may have.
6. I have the right to know the results or findings of this test when it is completed. These may be obtained by writing to the experimenter at:  
  
Maria Lammers  
  
4078 Paule  
  
St. Louis, MO 63125
7. I have the right to take as much time as I need to complete this test even if I feel that the experimenter wants me to hurry.
8. I have the right to keep my drawings. If I choose to keep my drawings I will allow the experimenter enough time to photocopy them.

## APPENDIX C

### OPERATIONAL DEFINITIONS

#### GUIDE TO CODING INDICATORS FOR DRAWING SERIES

This research includes testing possible correlation of graphic indicators in relationship with symptoms of sexual abuse and organic deficiency (as based upon Alzheimer's Disease), possibly inflicted by physical abuse or just lack of development due to the trauma of sexual abuse. It will search for characteristics which may exist in an identifiable and quantifiable way. Patterns or clusters in four areas of response and in each of the four separate drawing tasks will be analyzed.

Absence or presence of any of the following characteristics is not necessarily a "good" or "bad" sign but a response to be looked at in this particular context. Identification of some of these responses will be straight forward from graphic evidence, e.g. details on houses. Starred (\*) items may require reference to notes made during the drawing procedure, including behavioral cues, e.g. hesitant response. Relative measures which require computed means for comparison, other statistical information, or guidelines from templates identify may be marked with a plus sign (+), equal sign (=), or minus sign (-) depending upon the relationship with other data.

#### OPERATIONAL DEFINITIONS OF GRAPHIC INDICATORS

##### A. APPROACH TO DRAWING TASK

Lag time: Time between when the examiner gives the directive and the beginning of drawing (may be +, =, -).

Inappropriate to task: Response does not provide what is asked for in the directive (e.g.



Subject includes no name in Name Embellishment - NE, or subject draws "bugs in river" for House-Tree-Person-Modified - HTPM.)

Refusal of specific tasks: Subject completes some portion of the drawing but declines to do a specific part or parts (e.g. may do #1, #2, #4, and refuses #3).

Abstract response: Drawing is apparently created without reference to a particular object or instance. Response may be generalized beyond the particular and specific (e.g., When asked to draw his/her family, subject draws all embracing symbol for "the family of man").

Concrete response: Overly literal interpretation of task, with no evidence of abstract process or thinking beyond the immediate sensory concept (e.g., "Start with your name" and subject writes "your name" or more subtly, when asked to "Draw anything you'd like" the subject limits the response to "I like ice cream").

Excessive response: Elaboration of drawings beyond what is pertinent for request (e.g., multiple layers of details and colors which do not improve result, may seem to overvalue process or use it defensively).

Impulsive response: Response without deliberation or plan (e.g., this characteristic may be evident from observation of the tester such as notation of drawing prior to receiving instructions. Graphic indication may include forceful or out of control use of art materials, lines going off of the page or holes or slashes on the paper).

Minimal or hesitant response: Constrained or inhibited response, may be barely compliant with little evidence of investment in the results (e.g., scribbled or stick figures, no details, lack of variety in media; graphic response may be very light, timid or very small).

Hesitant responses may be indicated if Subject does not readily begin task or seeks reassurance and clarification which is redundant to task instructions (e.g., see recorded time for lag and remarks on response and inquiry sheets).

Derailing from goal: Drawing begins as requested, becomes something which may be loosely related but was not requested (e.g., configuration begins with a house, becomes a machine to take the Teddy bear picnic). May be a result or evidence of intruding stimulation which is either internal or external.

Destruction of material: Tearing or breaking of art materials is either evident or is noted in response and inquiry form (e.g., This would include both deliberate destruction and that which is from uncontrolled, forcefulness or enthusiasm in response).

## B. ORGANIZATION OF DRAWING

Distorted perspective: Lines and forms are flattened, bent, or otherwise in inappropriate relationship to each other (e.g., House may be presented with front, side, and back on one plane). Horizontal or vertical axis may be more than 15 degrees off center.

Distorted proportion: Separate parts of picture are drawn as if they do not relate to each other (e.g., Person adjacent to house could not get in the door).

Bird's eye view: Picture is drawn as if viewed from above ground level, looking down (e.g., objects get larger at the top, perspective is not straight ahead).

Worm's eye view: Picture is drawn as if the viewer is below ground level, looking up (e.g., objects get larger at the bottom, perspective is not straight ahead).

Fragmented Gestalt: Elements of the picture are not related in a way which appears logical or congruent (e.g., most of the elements for an individual object or scene may be

present but are not connected appropriately).

**Dominance:** Images are presented on the paper in position which presses to a particular area rather than being evenly distributed, bounded by typical margins, or as might be dictated by intent or content of picture. Coded R, L, T, or B.

**Right side dominance (R):** 75% or more of the drawing is placed on the right 50% of the page (Template/ruler may be used for close measure).

**Left side dominance (L):** 75% or more of the drawing is placed on the left 50% of the page. (Template/ruler may be used for close measure).

**Top half dominance (T)** 75% or more of the drawing is placed in the top 50% of the page. (Template may be used for close measure).

**Bottom half dominance (B):** 75% or more of drawing is in the top 50% of the page. (Template/ruler may be used for close measure).

**Specific Area Neglect:** An area is identifiable on the page, other than margins, which appears not to have been addressed or used for drawing for no apparent artistic or other articulated reason. The pattern may be consistent throughout a series of pictures (Also, R, L, T, or B).

**Incongruity:** Picture contains parts which would not be expected to go together and no explanation is offered for the disparity (e.g., a light bulb in a rabbit's ear on a bookshelf, or a skull and crossbones are on top of a Christmas tree. May also be a combination of written and printed letters, or a combination of words and pictures unless in a deliberate design).

### **C. QUALITY OF DRAWING**

**Ambiguous shape:** Form seems to have been deliberately drawn but it is not readily identifiable and is not labeled.

**Flattened shapes:** Forms and shapes appear squashed or distorted either as a whole or with one side leveled or neglected. May be smashed perspective.

**Lack of shapes/forms:** Shapes used are minimal, redundant, simplistic, or seem uninvested.

**Apparently aimless lines:** Drawing seems to go in random directions, purpose or goal is not conspicuous.

**Gaps between lines:** Lack of closure or lines at corners or in circular configurations.

**Overlapping in lines:** Lines extend over each other particularly at intersections or corners.

**Perseveration of line:** Apparently involuntary continuation of a single line or the repetitive drawing of lines which are not appropriate to the task.

**Reinforced lines:** Lines are redrawn, emphasized or accentuated by more than one stroke.

**Shaky lines:** Lines appear to be produced by shaking hand or instrument, have irregular, bumpy quality even when continuous.

**Unintelligible essentials:** Pictures which do not look like their label or type, do not fulfill the minimal expectation of the task (e.g., A blob which is identified as a house by the person who draws it but would not be recognizable when seen without verbal cues).

## **CONTENT OF DRAWING**

**Omission of essentials:** Drawings which do not include basic elements crucial for the function of the item being drawn (e.g., Houses should include walls, roof, floor, or baseline, door, and window. Trees need a trunk, root or baseline, branches, and or leaves.

People need a head, body, all limbs, and facial features if close up. Note that sometimes omissions may be explained or the apparently missing item may be implicit).

**Overemphasis on details:** A disproportionate inclusion of secondary features which appear to be more important than the primary object which was elicited by the task (e.g., a family drawing may show more emphasis on depicting the picnic food than the people).

**Irrelevant letters, numbers:** The inclusion of letters, words, or numbers in an apparently random fashion which may have no obvious association with the assigned task (e.g., a bouquet of flowers may be drawn but words such as doggy, view, crime, and 1812 are written at various places on the page). For purposes of the initial study, this category also includes the response of **Superfluous words, letters:** The inclusion of words or numbers which may be of obvious association but do not need to be included and do not add any new information (e.g., Colors or other elements may be labeled apparently unnecessarily such as grassy area having GREEN written on it).

**Bizarre/violent content:** Drawing contains striking combinations and elements of incongruity or eccentricity which may be discordant, contradictory, and disturbing or a violent theme (e.g., two figures named mother and child but actually shows one figure chasing the other with a knife, figures with blood).

**Lack in content:** Minimal or stark configurations, responses to tasks.

**Personalized content:** Drawings or process apparently tap into personal recollections and associations which are spontaneously shared (e.g., House from H-T-P-M may become specific house when the Subject was five years old, markers may trigger lengthy anecdote about high school art teacher).

Perseveration in theme: Themes and elements are carried over in the content and commentary from one picture to another in spite of different topics (e.g., initial picture may have elements from jungle, this persists in successive drawings and remarks; the house is a jungle house, the family are cannibals).

Smoke present from chimney: In the house drawings with a chimney, whether the H-T-P-M or others, smoke is drawn and colored in as if coming from the chimney.

Red House: Any house drawn, especially in the H-T-P-M drawing which is drawn completely in red or outlined as red.

One window alone: Only one window in the house.

One window differs: One of the windows drawn on any building especially the house in the H-T-P-M is of a different scheme from the basic scheme of the majority of the windows (e.g., one circular window with all other square windows or one window with closed shutters and the rest are opened shutters).

Phallic tree: A tree which is drawn as an elongated form with a pointed or rounded off top (especially in the H-T-P-M).

Phallic chimney: A chimney which is drawn as an elongated form with a pointed or rounded off top (especially in the H-T-P-M).

Face colored in: Any face which has been drawn and then filled in with color or color covers the face as if marked over.

Genitalia verbally recognized as male or female: Any shape or form which the subject identifies and describes in the inquiry section of the assessment with a name or action involving male or female genitalia.

Checklist for graphic indicators

Code #

Please check for apparent characteristics in each of the four drawings

	CHARACTERISTIC	NE	H-T-P-M#	K-F-D-M#3	FC-T#4
A.	Lag time #				
Approach to	Inappropriate to task				
	Refusal of specific tasks				
Drawing Task	Abstract response				
	Concrete response				
	Confused response				
	Excessive response				
	Impulsive response				
	Minimal response				
	Derailing from goal				
	Destruction of material				
B.	Distorted perspective				
Drawing Organization	Distorted proportion				
	Bird's eye view				
	Worm's eye view				
	Fragmented gestalt				
	Dominance R L T B				
	Specific area neglect				
	Incongruity				
C.	Ambiguous shapes				
Drawing Quality	Flattened shapes				
	Lack of shapes/form				
	Apparently aimless lines				
	Gaps between lines				
	Overlapping lines				
	Perseveration line/form				
	Reinforced lines				
	Shaky lines				
	Unintelligible essentials				
D.	Omission of essentials				
Drawing Content	Overemphasis on details				
	Irrelevant/extra letters				
	Bizarre/Violent content				
	Lack in content				
	Personalized content				
	Perseveration in theme				
	Smoke present from chimney				
	Red house				
	One window alone				
	One window different				
	Phallic tree				
	Phallic chimney				
	Face colored in				
	Genitalia verbally recognized M & F				
	Sexual content inappropriate to age				

**#1 NAME EMBELLISHMENT (N-E)**

**Instructions:** "Begin with your name, nickname, or initials, and decorate it or make it into a picture or a design which says whatever you want to about yourself."

**RESPONSE**

Time instructions given \_\_\_\_\_ begun \_\_\_\_\_ finished \_\_\_\_\_

List elements of picture in order drawn:

Personal reference Yes \_\_\_ No \_\_\_

Record spontaneous questions or comments:

**CHOICE OF MATERIALS:**(check all used) pen \_\_\_ pencil \_\_\_  
pastels \_\_\_ fine markers \_\_\_ thick markers \_\_\_

**COLORS:** W \_\_\_ Br \_\_\_ V \_\_\_ Bl \_\_\_ Grn \_\_\_ Y \_\_\_ O \_\_\_ R \_\_\_ Pnk \_\_\_

**USE OF PAPER:** vertical \_\_\_ horizontal \_\_\_

Less than 1/3 \_\_\_ about 1/3 \_\_\_ more than 1/3 \_\_\_

Position of main images: diffuse \_\_\_ midsection \_\_\_

cropped to margin left \_\_\_ right \_\_\_ top \_\_\_ bottom \_\_\_

Corrections, erasures: Yes \_\_\_ No \_\_\_ Additions after phase 1  
Yes \_\_\_ No \_\_\_

Specify:

**INQUIRY**

**PREFERENCES:**

**CODE#**

hardest \_\_\_ easiest \_\_\_

liked best \_\_\_ liked least \_\_\_ order: 1 \_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_

"How so?"

"Tell me something about your name..."

"What would you like me to know about you from this drawing?"

Other:

Essentials included: Yes \_\_\_ No \_\_\_

Essentials intelligible: Yes \_\_\_ No \_\_\_

Appeared to understand task: Yes \_\_\_ No \_\_\_

Response appropriate to request: Yes \_\_\_ No \_\_\_

Drawn response congruent with behavior: Yes \_\_\_ No \_\_\_

Writing congruent with drawing: Yes \_\_\_ No \_\_\_ N/A \_\_\_

Verbalization congruent with drawing: Yes \_\_\_ No \_\_\_



**#2 HOUSE-TREE-PERSON-MODIFIED (H-T-P-M)**

**Instructions:** "Draw a picture any way you want, but include a house, a tree and a person."

**RESPONSE**

Time instructions given \_\_\_\_\_ begun \_\_\_\_\_ finished \_\_\_\_\_

List elements of picture in order drawn:

Personal reference Yes \_\_\_ No \_\_\_

Record spontaneous questions or comments:

**CHOICE OF MATERIALS:**(check all used) pen \_\_\_ pencil \_\_\_

pastels \_\_\_ fine markers \_\_\_ thick markers \_\_\_

**COLORS:** W \_\_\_ Br \_\_\_ V \_\_\_ Bl \_\_\_ Grn \_\_\_ Y \_\_\_ O \_\_\_ R \_\_\_ Pnk \_\_\_

**USE OF PAPER:** vertical \_\_\_ horizontal \_\_\_

Less than 1/3 \_\_\_ about 1/3 \_\_\_ more than 1/3 \_\_\_

Position of main images: diffuse \_\_\_ midsection \_\_\_

cropped to margin left \_\_\_ right \_\_\_ top \_\_\_ bottom \_\_\_

Corrections, erasures: Yes \_\_\_ No \_\_\_ Additions after phase 1

Yes \_\_\_ No \_\_\_

Specify:

**INQUIRY****PREFERENCES:**

**CODE#**

hardest \_\_\_ easiest \_\_\_

liked best \_\_\_ liked least \_\_\_ order: 1 \_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_

"How so?"

"I wonder what it's like to be this person?"

"What might it be like to live in this house?"

"Tell me a little about this tree..."

Other:

Essentials included: Yes \_\_\_ No \_\_\_

Essentials intelligible: Yes \_\_\_ No \_\_\_

Appeared to understand task: Yes \_\_\_ No \_\_\_

Response appropriate to request: Yes \_\_\_ No \_\_\_

Drawn response congruent with behavior: Yes \_\_\_ No \_\_\_

Writing congruent with drawing: Yes \_\_\_ No \_\_\_ N/A \_\_\_

Verbalization congruent with drawing: Yes \_\_\_ No \_\_\_

**#3 KINETIC-FAMILY-DRAWING-MODIFIED (K-F-D-M)**

**Instructions:** "Draw a picture of your family doing something together...define family any way you want."

**RESPONSE**

Time instructions given \_\_\_ begun \_\_\_ finished \_\_\_

List elements of picture in order drawn:

Personal reference Yes \_\_\_ No \_\_\_

Record spontaneous questions or comments:

**CHOICE OF MATERIALS:**(check all used) pen \_\_\_ pencil \_\_\_

pastels \_\_\_ fine markers \_\_\_ thick markers \_\_\_

**COLORS:** W \_\_\_ Br \_\_\_ V \_\_\_ Bl \_\_\_ Grn \_\_\_ Y \_\_\_ O \_\_\_ R \_\_\_ Pnk \_\_\_

**USE OF PAPER:** vertical \_\_\_ horizontal \_\_\_

Less than 1/3 \_\_\_ about 1/3 \_\_\_ more than 1/3 \_\_\_

Position of main images: diffuse \_\_\_ midsection \_\_\_

cropped to margin left \_\_\_ right \_\_\_ top \_\_\_ bottom \_\_\_

Corrections, erasures: Yes \_\_\_ No \_\_\_ Additions after phase 1

Yes \_\_\_ No \_\_\_

Specify:

**INQUIRY**

**PREFERENCES:**

**CODE#**

hardest \_\_\_ easiest \_\_\_

liked best \_\_\_ liked least \_\_\_ order: 1 \_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_

"How so?"

(unless labeled spontaneously-)

"These people are---" Record names and positions on paper.

"Could this be a real life event?"

"Can you talk a little about what it's like to be in this family?"

Essentials included: Yes \_\_\_ No \_\_\_

Essentials intelligible: Yes \_\_\_ No \_\_\_

Appeared to understand task: Yes \_\_\_ No \_\_\_

Response appropriate to request: Yes \_\_\_ No \_\_\_

Drawn response congruent with behavior: Yes \_\_\_ No \_\_\_

Writing congruent with drawing: Yes \_\_\_ No \_\_\_ N/A \_\_\_

Verbalization congruent with drawing: Yes \_\_\_ No \_\_\_

**#4 FREE CHOICE, TITLED (F-C-T)**

**Instructions:** "Draw anything you like and give it a title."

**RESPONSE**

Time instructions given \_\_\_\_\_ begun \_\_\_\_\_ finished \_\_\_\_\_

List elements of picture in order drawn:

Personal reference Yes \_\_\_ No \_\_\_

Record spontaneous questions or comments:

**CHOICE OF MATERIALS:**(check all used) pen \_\_\_ pencil \_\_\_

pastels \_\_\_ fine markers \_\_\_ thick markers \_\_\_

**COLORS:** W \_\_\_ Br \_\_\_ V \_\_\_ Bl \_\_\_ Grn \_\_\_ Y \_\_\_ O \_\_\_ R \_\_\_ Pnk \_\_\_

**USE OF PAPER:** vertical \_\_\_ horizontal \_\_\_

Less than 1/3 \_\_\_ about 1/3 \_\_\_ more than 1/3 \_\_\_

Position of main images: diffuse \_\_\_ midsection \_\_\_

cropped to margin left \_\_\_ right \_\_\_ top \_\_\_ bottom \_\_\_

Corrections, erasures: Yes \_\_\_ No \_\_\_ Additions after phase 1

Yes \_\_\_ No \_\_\_

Specify:

**INQUIRY**

**PREFERENCES:**

**CODE#**

hardest \_\_\_ easiest \_\_\_

liked best \_\_\_ liked least \_\_\_ order: 1 \_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_

"How so?"

"Please talk a little about what this picture says."

Other:

Essentials included: Yes \_\_\_ No \_\_\_

Essentials intelligible: Yes \_\_\_ No \_\_\_

Appeared to understand task: Yes \_\_\_ No \_\_\_

Response appropriate to request: Yes \_\_\_ No \_\_\_

Drawn response congruent with behavior: Yes \_\_\_ No \_\_\_

Writing congruent with drawing: Yes \_\_\_ No \_\_\_ N/A \_\_\_

Verbalization congruent with drawing: Yes \_\_\_ No \_\_\_

I, Maria M. Lammers, hereby submit this thesis/report to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available to use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

Maria Lammers  
Signature of the Author

12/19/96  
Date

Differences On Diagnostic Drawings  
From Children Who Have Been  
Reportedly Sexually Abused and  
Those Who Have Not  
Title of Thesis

Day Cooper  
Signature of Graduate Office Staff

12-24-96  
Date Received