

AN ABSTRACT OF THE THESIS OF

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Human Figure Drawing as an Evaluative Measure with Sex Offenders.

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The Draw-A-Person test has been used with many samples or groups. This study employed subjects from a less researched area, the criminal population. The research focused on two specific characteristics that earlier research has found to be associated with sex offenders, closed legs and a closed mouth.

A total of 90 male subjects were used in this study. Three groups of 30 males were tested: sex offenders, non-sex offending criminals, and non-criminals. Some of the information was gathered in assessments given by the El Dorado Correctional Facility, El Dorado, KS. The remainder of the information was collected with the efforts of the Draw-A-Person class from Emporia State University. The class administered DAP's to subjects who were age equivalent to the sex offender group. Three judges then assessed whether the drawing had closed legs and a closed mouth.

The chi square test was conducted to examine the frequencies of the evaluative characteristics in each group. No significance was found in the frequency of closed mouths and closed legs across the three groups.

The results reflect a small sample size without diversity. More population samples need to be chosen to fully assess the symbolism of drawings with closed legs and a closed mouth. Earlier research identifies sex offenders with closed legs and a closed mouth; however, this study's results were found to be inconclusive.

USE OF THE HUMAN FIGURE DRAWING AS AN  
EVALUATIVE MEASURE WITH SEX OFFENDERS

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A Thesis

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## CHAPTER 1

### INTRODUCTION

Psychoanalytic theory assumes there is a relationship between symbolic expression and psychodynamics, and that the knowledge of either part of this relationship will allow one to predict the other. The psychodynamic theory of personality is one of beliefs about behaviors arising from hidden sexual and aggressive urges connected with an experience early in life. Based upon this theory, a search for explicit methods began that would elicit material that may be part of an individual's hidden urges (Sunberg, 1977). The Collected Works of C.G. Jung (Hull, 1971) described the psychoanalytic theory of Jung's symbolic image. The image, or drawing, reveals its meaning when it is accepted by the individual as a projection of oneself. A projection may be seen as a process of expressing one's attributes, feelings, and motivations to people or objects within the environment.

A drawing has a relationship with the person who drew it and may reveal signs of specific events or characteristics of that individual (Hammer, 1980). In addition, Hammer explained that projective drawings are the subject's thoughts "caught" on paper. Historically, men and women used drawings to record their emotions and actions long before the use of a specific speech was recorded. Through the years, people have expressed themselves through drawings that can produce symbols whose meanings can be used as a form of symbolic speech.

A human figure drawing is a subject's representation of a person. The

house-tree-person drawing is a subject's drawing of a house, a tree, and a person. Few studies exist in the area of human figure and house-tree-person drawings with sex offenders. Of the limited published research that has been done, sexual offenders have been identified through indicators in their drawings. The indicators which have been found to be associated with the sex offender drawings are rigid closed legs and the closed mouth of the figure. These characteristics are associated with the rigidity of the figure.

In the limited research that has been done, Lie's 1988 study is the most recent. Before this time, research studies dated back to 1980 (Hammer), 1963 (Urban), and 1949 (Machover). Over the last several years, research on the Draw-A-Person (DAP) and sex offenders has not been studied.

The purpose of this study was to determine if there was a significant difference in the drawings of incarcerated male sex offenders, incarcerated male inmates who had non-sex offenses, and non-criminal males. The drawing was used to identify and compare central characteristics of the sex offender's underlying personality traits that may not be found in the general population of males.

### Review of Related Literature

Projective testing has a long history, dating back to the late 1800's with Galton, Binet and Henri, and Kraepelin. However, the real emphasis began during the period when the projective technique used ambiguous stimuli (i.e. inkblots) to encourage the projection of psychopathology. Later, in

1935, Morgan and Murray introduced the Thematic Apperception Test (TAT). This technique allowed individuals to tell a story while projecting their own personality traits unconsciously (Phares, 1988).

The DAP was the projective test utilized within this study. The research on the validity of the DAP has appeared doubtful (Sunberg, 1977; Swenson, 1957). According to Slansky (1989) and Hammer (1980), the DAP demonstrated concurrent validity by the degree of correlation with other testing instruments. The internal consistency of the Draw-A-Person test has not been evaluated in the past. In addition, Strommen and Smith (1987) obtained results showing a high degree of reliability in the Draw-A-Person test across administrations at differing time intervals. Strommen and Smith reported the internal consistency to be "good" among all ages, with no sex differences in mean scores. Among the various subgroups used for this study, the reliabilities ranged from .63 to .92. Given the positive test-retest reliabilities that have been reported (Harris, 1963), the DAP is internally consistent and yields stable measures over time.

Inter-rater and intra-rater reliability were discussed by Dunn (1967) and Brown (1977). Dunn's studies were administered to test Harris' initial error of omission by not focusing on large numbers and age groups. Therefore, Dunn administered the DAP to 72 children, grades 1 through 6. The inter-rater reliability was .88 and the intra-rater reliability was .93. These were consistent with Harris' original findings. Brown utilized a larger group of children (386)

than did Dunn. The judges in Brown's study found complete agreement 88% of the time.

Many psychologists question the reliability of the Draw-A-Person test, although, Machover (1949) concluded that the projection of a human figure drawing is an excellent expression of an individual's needs and conflicts. Machover's extensive clinical work with the DAP convinced her that it is a valuable instrument. This "clinical evidence" needs to be taken into account. Machover's clinical work was done to broaden her knowledge in drawing perception and interpretation of this projective test (Pepitone & Gray, 1964).

Lie (1988) conducted a cross-sectional study of boys who became offenders. The DAP was used as a part of the test battery in this study that also included the Minnesota Multiphasic Personality Inventory (MMPI). The use of the MMPI showed evidence that social introversion is a characteristic displayed by offenders. This study also indicated a possibility for "guarded" intelligence. According to Lie, this means the offender is easily distracted and less likely to show special interests or abilities. The most dominant offender characteristic was aggressiveness. This study found closed legs of the offender's human figure drawing predominant as a characteristic of rigid control over sexual impulses and a feature that is a sign of sexual anxiety. It appeared that the proportion of this rigid feature was significant when a female figure was drawn.

Hammer (1980) stated that rigid characteristics are symbolic of being closed off to the world. In a case study, according to Hammer, the male sex offender's drawing of a man was a self portrait of himself. In addition, the sex offender's rigidity of closed legs and closed mouth were identified and interpreted as having inner impulses and keeping those impulses closed off from the rest of the world. Hammer lists these traits to be among attributes identified with sex offenders.

Urban (1963) proposed that specific parts of the human figure drawing (i.e. closed mouth, and closed legs) have a parallel meaning when referring to rigidity. If the figure has a rigid characteristic associated with the mouth, there is also a suggested meaning that the person has a refusal to reveal oneself to others. This could also be a sign of suppression and hostility. If the drawing is a stick figure, it may mean that the person is easily distracted and less likely to show special interests or abilities. Rigidly closed legs are associated with the rejection of one's own sexuality and/or the rejection of sexual approaches by others. These rigid characteristics are all associated with sex offenders.

Machover (1949), throughout her investigations, associated a rigid stance with closed legs as reflecting the following: repression, awkwardness, tension, and self-conscious feelings. Bradford, Bloomberg, and Bourget (1988) gave evidence to support research suggesting pedophilic sex offenders may be associated with awkwardness, feelings of inadequacy, and aggravation. This study also indicated that on the Wechsler Adult Intelligence

Scale-Revised (WAIS-R), these individuals fell into the average to below average range, explaining a possible reason for being intellectually guarded.

The previous material examined the reliability and validity of the DAP. This instrument was used in the present study as a testing measurement to examine the relationship between the rigidity of the human figure drawing's closed legs and closed mouth with the sex offender population. This study examined how often the closed mouth and closed legs occurred in relation to the general prison population and the general population of males. Closed legs and a closed mouth served as indicators of the sex offender personality. It was hypothesized that persons with sex offender personality traits would exhibit significantly more rigid human figure drawing characteristics (i.e. closed legs, and closed mouth). The DAP test has consistently been found in the top ten most used psychological tests. Sunberg (1977) ranked only the Rorschach above the DAP in projective tests. The high usage of this test has implied a need for increased research in clinical assessment.

A review of the literature shows little research concerning the rigidity of the closed legs and the closed mouth of the human figure as an indicator for sex offenders. Existing research appears to support the belief of specific areas of rigidity such as the closed legs and the closed mouth of the human figure drawing.

## DEFINITION OF TERMS

### Closed Legs

A drawing of a human figure in which the legs of the figure are drawn side by side, with no apparent gaps or spaces between the two legs. When no legs are visible, an assumption of closed legs was made by looking to see if the feet were side by side, with no gap or space.

### Closed Mouth

A human figure drawing in which the mouth is perceived as closed, no gap or space is left between the figure's lips.

### Open Legs

A drawing of a human figure in which the legs of the figure are drawn with a gap or space between the two legs. When no legs are visible, an assumption was made by a gap or space between the feet.

### Open Mouth

A human figure in which the mouth is perceived as open, with a gap or space between the figure's lips.

### Sex Offender

A person who has been convicted of a sexual offense according to Kansas Law.

## CHAPTER 2

### METHOD

#### Subjects

Three groups of male subjects, ages 17 - 67 were used in this study. One group consisted of 30 sex offenders from the El Dorado Correctional Facility in Kansas. The second group was composed of 30 non-sex offenders chosen from the general population of inmates at El Dorado Correctional Facility. The third group was a sample of 30 non-criminal males residing in Kansas.

#### Instrument

Draw-A-Person Test. The DAP is a test designed to measure certain aspects of a person's personality from an interpretation of a drawing. The drawing may be male and/or female figures drawn as a projection of the subject's own personality dynamics (Urban, 1963). This test was given with the established materials and according to standard directions. The standard instruction is to ask the person to "draw a person to the best of your ability." The subject is then given a sheet of paper (8 1/2" X 11") and a number 2 pencil with an eraser. Observation of the drawing is made by looking for the sequence of the parts drawn and time limits used. Preliminary questions asked by the subject and spontaneous comments are all noted along with the gender of the drawing. If resistance occurred during the administration of this test the subject

would be told, "this has nothing to do with your ability to draw, I am interested in how you try to make a person" (Machover, 1949).

### Procedure

Research was done first by going through the sex offender files. A count was taken as to how many DAPs are on file and the ages of the sex offenders were recorded. The total number of DAPs from the sex offender group ( $N=14$ ) that were found in the psychological test files was then subtracted from 30. The number that remained was the total number of sex offenders that were tested for the purpose of this study ( $N=16$ ). A list of sex offenders was printed from the psychological files at El Dorado Correctional Facility. From this list, 16 sex offenders were chosen randomly to participate in the study. These individuals were tested according to DAP procedures. Permission was obtained from the El Dorado Correctional Facility to collect these data from the institution's files and to administer the Draw-A-Person test.

For the non-sex offender criminal group, DAP's were obtained from the existing psychological test files from the El Dorado Correctional Facility ( $N=18$ ). These DAP's were used if the ages matched those already found within the sex offender group. There were not 30 individual DAP's found in the psychological test files. The number of DAP's found was subtracted from 30 and the remainder ( $N=12$ ) were gathered by administering the DAP to the criminal population within the prison who had not been previously tested with the DAP.

The non-criminal group's DAPs were obtained from the Draw-A-Person course at Emporia State University during the fall of 1993 and by the researcher. The testers were graduate students trained according to the DAP manual. The graduate students tested the subjects after the students had gained experience with this test (4 to 5 weeks). The testers were briefed with the requirements for gender and age needed for the stratified group to match the sex offender group. The testers were also given a sheet of paper which had the instructions for the procedure they were to follow (see Appendix A). The testers did not know the purpose of the study until all the data was collected.

Each group followed this procedure for the administration of the DAP to all subjects. Upon arrival to be tested, the subjects received a packet by the tester. This packet contained a cover sheet which was an informed consent form (see Appendix B), a sheet of paper with instructions for the DAP test, and a blank sheet of paper upon which the subject drew the human figure. The subject was then given a number for confidentiality. The number appeared on all pages of the packet except the informed consent form. After the subject had signed the consent form, the researcher placed the consent form in a separate folder. The subjects were instructed to leave their names and/or identifying factors off the rest of the packet. The subject then read the next page, "On the following page, draw a person to the best of your ability." The subject continued with the drawing portion of the DAP. The researcher observed the

subject as the human figure was being drawn. All administrations of the DAP were given individually.

Measurement of the DAP test was made by three selected judges, chosen after the data was collected. Judges did not know the specific groups involved in the study and were not given information about the purpose of this study. A total of 90 drawings were accumulated by the subjects. Each judge received a random set of 30 drawings to assess. The judges did not know the hypothesis being tested, but evaluated the drawings according to the definitions provided by the investigator. The judges were each given a definition describing the evaluative characteristics of the human figure drawing form. The judges assessed whether the human figure drawing had or did not have each of the characteristics. The first characteristic assessed was closed legs. The second element judged was whether the human figure had a closed mouth.

Permission was obtained from the Human Rights Committee to collect data for this study from the sex offender group, the non-sex offending criminal group, and the general population group. Data collected has been filed and kept with the researcher.

## CHAPTER 3

## RESULTS

The Draw-A-Person test was given to three groups of men with a total of 30 subjects in each group. The groups consisted of a sex offender group, a non-sex offending criminal group, and a non-criminal group. Each group's members were matched according to the ages within the sex offender sample. Two characteristics were examined in each of the 90 subject's drawings: closed legs and a closed mouth.

In comparing the closed legs characteristic in each of the drawings from the three groups, no significant difference among the groups was found. The sex offender group had 5 out of 30 drawings with closed legs. The non-sex offending criminals had 8 out of 30 drawings with closed legs. And the non-criminal group had 7 out of 30 drawings with closed leg present,  $\chi^2 (2, N = 30) = 54.59, p > .05$ . Sex offenders, non-sex offending criminals, and non-criminal male's drew closed legs of a human figure at the same frequency.

In comparing the closed mouth of the human figure drawing, the null hypothesis was rejected,  $\chi^2 (2, N = 30) = 9.43, p > .05$ . The sex offender group and the non-sex offending criminal sample each had 21 drawings out of the 30 drawings with a closed mouth. The non-criminal group had 19 of 30 drawings with a closed mouth. Sex offenders, non-sex offending criminals, and non-criminal males drew a closed mouth at the same frequency.

The chi square test of independence was used to identify whether a significance occurred among the groups. The results from this test are presented in Table 1. The level of significance was .05.

The number of observations represented the number of times the evaluative characteristics were chosen (closed legs and closed mouth). The chi square test of independence indicated there were no significant differences among the three groups used for this study. The sex offender sample had the least number of drawings with closed legs ( $N=5$ ). The non-criminal population had 7, and the non-sex offending criminals had 8 drawings with closed legs. The non-criminal sample had the least number of drawings with a closed mouth ( $N=19$ ). The sex offender and non-sex offending criminal samples each had 21 drawings with a closed mouth in each group.

Table 1

Chi square test of drawing characteristics by sex offenders, non-sex offender criminals and non-criminals.

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Chi Square Test of Independence

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Number of Observations	81
Chi-Square	0.6173
Degrees of Freedom	2
Significance Level	0.7345
Contingency Coef.	0.0870
Cramer's Phi Prime	0.0873

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## CHAPTER 4

### DISCUSSION

This study hypothesized that the male sex offender sample would have more closed legs and closed mouths than the male non-sex offending criminal sample and the non-criminal male population. The evaluative characteristics in this study have been interpreted as having a symbolic meaning of inner impulses and keeping those impulses closed off from the rest of the world. These characteristics also suggested the person had signs of suppression and hostility. The closed legs are associated with rejection of one's sexuality. The closed mouth is associated with a refusal to reveal oneself. No such findings occurred because the frequencies among the groups were not significantly different.

The findings in this study are not in agreement with the previous research (Hammer, 1980; Lie, 1988; Machover, 1949; Urban, 1963). In the previous studies, the authors associated the evaluative characteristics of this study (i.e. closed legs and closed mouth) with the primary population of this research. This replication reveals a change may have occurred over the years. It is evident present research does not in agree with previous research. A second conclusion is the possibility that the DAP may not be a valid instrument.

An important factor that may have influenced the outcome of this study is the limited size and diversity of the samples. The males were chosen from Kansas or Kansas Institutions. No subjects outside of the state of Kansas were

used. Thus, a larger population from other states and countries may be used to enhance the sample in related studies.

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## APPENDICES

**APPENDIX A**  
**JUDGE'S INFORMATION PACKET**

This packet contains instructions for each individual judge. Each judge's packet contains 30 copied human figure drawings, a pencil, definitions of the two evaluative characteristics, and an evaluation form to fill out for the researcher.

Before beginning the evaluation, each judge is to read the definitions of a closed or open mouth and closed or open legs. This can be read on the following page. After the definitions are read, the judge continues with assessing whether each of the human figure drawings have or does not have each of the evaluative characteristics.

Each of the copied drawings have a three digit number in the top right hand corner. This is the drawing's identification number. This number also appears in the first column of the evaluation form. When the correct numbers from the drawing are matched to the number in the first column, the judge is to decide whether there is an open or closed mouth, and open or closed legs. When the decision is made, the judge marks an "O" for open or a "C" for closed in the appropriate column.

**APPENDIX B**  
**INFORMED CONSENT DOCUMENT**

The Department/Division of Psychology and Special Education support the practice of protection for the human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

In this study, you will be asked to participate to the best of your ability. You will be asked to draw a person on a single sheet of white paper. The participant will not be subjected to any risks. This study is expected to benefit others involved in learning more about this drawing exercise. Upon completion of this exercise, questions may be asked about the research study and what is being measured, however, confidentiality of this study must be maintained.

"I have read the above statement and have been fully advised of the procedures to be used in This project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and possible risks involved. I understand the potential risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

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Subject and /or authorized representative

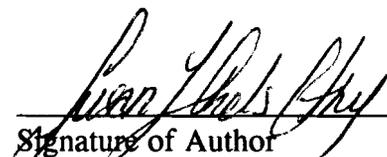
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