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The validity of selected draw-a-person test classifying criteria among homosexual and non homosexual males.

Joel Von Ornsteiner
Indiana State University

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VITA

NAME: Joel Von Ornsteiner

PLACE OF BIRTH: Reno, Nevada

DATE OF BIRTH: August 20, 1959

EDUCATIONAL HISTORY:

Indiana State University, Terre Haute, Indiana--Ph.D
Guidance and Psychological Services, 1999
City College of New York City, New York, New York--Advanced
Certification in School Psychology, 1996
City College of New York City, New York, New York--M.A.
School Psychology, 1995
Hunter College, New York City, New York--M.A.
Special Education & Behavior Disorders, 1993
New York University, New York City, New York--M.A.
Art Education, 1987
State University of New York at Purchase, Purchase,
New York--B.A. Fine Arts, 1981

EMPLOYMENT HISTORY:

The National Institute For People With Disabilities Center
For Specialty Therapy, New York, New York, Doctoral
Internship, 1998-99
The Young Adult Institute, Community and Family Services
New York, New York, Crisis Intervention Psychologist,
Counseling Psychologist, and School Psychologist,
1995-96
Medical Center of St. Vincent's Hospital, New York,
New York, Special Education Art Teacher, 1993-95
New York City Public Schools, Public School 94 at 61,
New York, New York, Special Education Art Teacher for
the Emotionally Disturbed, 1991-93
New York City Public Schools/Alternative High School
Program/The Harvey Milk School, New York, New York,
Special Education Teacher for the Learning Disabled,
1990-91

ACADEMIC HONORS:

University Fellowship,	Indiana State University
Paul Witty Scholarship,	Indiana State University
C.U.N.Y. Scholarship,	City College
NYC Teachers Scholarship,	Hunter College
Hunter Scholarship,	Hunter College
NYU Scholarship,	New York University

PUBLICATIONS:

Gender Identity Disorder in Adolescents: The Role of the School Psychologist in Identification, Assessment and Treatment Services. Communique. June 1996.

A Therapeutic, Sexuality Video Presentation for Improving the Skills of Persons with Mental Retardation and Other Developmental Disabilities. (Part 2 Relationships). The National Institute for People with Disabilities. October 1996.

Creating Educational Environments That Value Gay and Lesbian Youth: A Synopsis Of A Panel Presentation. Council for Children with Behavioral Disorders. February 1996.

A Multi-Session, Therapeutic, Sexuality Curriculum for Improving the Skills of Persons with Mild Mental Retardation and Other Developmental Disabilities. (Part 1 & 2). HIV/AIDS & Mental Hygiene. October 1995.

PANEL PRESENTATIONS:

Symposium on Understanding Individual Differences: What Educators Should Know About Adolescents Who Are Gay, Lesbian, or Bisexual. Sponsored by the Council for Children with Behavioral Disorders. Teachers College, Columbia University, New York City, New York. February 16, 1995

Conference Workshop: Crisis Intervention/ A Behavioral Case Study Model. Sponsored by The Young Adult Institute. 17th Annual International Conference on MR/DD. Crown Plaza Manhattan Hotel, New York City, New York. April 27th - May 1st, 1996.

THE VALIDITY OF SELECTED DRAW-A-PERSON TEST
CLASSIFYING CRITERIA AMONG HOMOSEXUAL
AND NON HOMOSEXUAL MALES

A Dissertation

Presented to

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In Partial Fulfillment

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By

Joel Von Ornsteiner

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APPROVAL SHEET

The dissertation of Joel Von Ornsteiner, Contribution to the School of Graduate Studies, Indiana State University, Series III, Number 767, under the title *The Validity of Selected Draw-A-Person Test Classifying Criteria Among Homosexual and Non Homosexual Males* is approved as partial fulfillment of the requirements for the Doctor of Philosophy Degree.

8/20/99
Date

Kenneth R. Waller
Committee Chairperson

John E. Carter
Committee Member

Robert J. ...
Committee Member

8/16/99
Date

Step E. Conroy
For the School of Graduate Studies

ABSTRACT

The purpose of this study was to explore the validity of Machover's (1949) interpretation that attention to both the hips and buttocks drawn by male subjects in their first male Draw-A-Person Test (DAP) or the drawing of a female figure first are significant indicators of male homosexuality. The hypothesis was that the frequency of these homosexual indicators among non-instituted homosexuals would be significantly higher ($P = < .05$) than the male heterosexual group. One hundred homosexual and 100 heterosexual males were selected from groups of volunteers from two universities, one bookstore and a community center in the New York City area. The subjects were administered a DAP test in booklet format and a questionnaire. The drawings were classified for homosexual indicators blindly and independently by three judges who were trained in the use of the Machover interpretation of the DAP.

Chi square analyses were calculated for the frequency of hips and buttocks and for the drawing of a female figure first and no significant differences between the self identified homosexual and heterosexual male groups in the

expected direction were found. It was concluded that the lack of any significant difference between the scores of the homosexual and heterosexual males in this study casts considerable doubt on the validity of the male homosexual interpretations explored. Speculations were made concerning the widely discrepant results from past studies and this investigation. The majority of the past research had been conducted within institutional settings and there have been cultural changes over the last fifty years in both psychology and society's tolerance for the male homosexual. Unlike any previous DAP study, one-hundred urban homosexual and one-hundred heterosexual males were randomly selected.

This researcher cautions that the DAP test should be interpreted with other available information, and results based on its independent use are viewed with much skepticism. Implications for future research were discussed.

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Chapter 1

INTRODUCTION

Personality analysis based upon the interpretation drawings of the human figure has long been recognized as an important aspect of assessment (Riethmiller & Handler, 1998). Human figure drawings and the Draw-A-Person Test have been used as a popular screening device in evaluating a client's current personality, and their adjustments and environmental pressures (Merritt & Kok, 1997). As with many personality tests, human figure drawings (HFD) or the Draw-A-Person Test (DAP) are often done before a client enters a mental health service program, or a special public or private education school program. These drawing may also form initial impressions of a homosexual orientation and generate hypotheses, which determine further testing.

When a client is referred for an individual evaluation, the psychologist designs a test battery to

answer questions specific to that client's presenting concerns. Generally, certain tests are considered the core of the battery with other tests selected as needed. Human figure drawings are the fifth most widely used assessment instruments in the United States, following closely behind the Minnesota Multiphasic Personality Inventory, Wechsler Adult Intelligence Scale Revised, Bender-Gestalt, Wechsler Intelligence Scale for Children - Revised, and Wechsler Preschool Primary Scale of Intelligence (Piotrowki & Keller, 1989). It is generally in the top 10 lists of psychology tests (Lubin, Larsen, & Matarazzo, 1984; Lubin, Larsen, Matarazzo, & Seever, 1985) and one of the three most popular projective tests (Posey & Hess, 1984).

The introduction of HFD for psychological assessment was developed by Goodenough (1926) as a standardized intelligence evaluation for children. Popular interest in psychoanalytic theory, coupled with the interpretation of such drawings, sparked a number of classifying techniques and Machover's (1949) DAP, continues to be currently applied (Riethmiller & Handler, 1998; Merritt & Kok, 1997). In the interest of brevity, this author's discussion will be confined to the Machover's Draw-A-Person Test (DAP), recognizing that his remarks are equally applicable for the other Human Figure Drawings (HFD) procedures in this study.

When administering the DAP, the client is given a pencil and an 8 ½ by 11 inch sheet of blank paper, on which he is instructed to "draw a person." The psychologist observes the client noting behaviors and drawing style. Machover (1949) stated that when the subject is requested to draw, he/she consciously and unconsciously renders himself/herself on to his first drawing, as he/she wishes to appear to others.

This investment in body organs, or the perception of the body image as it has developed out of personal experience, must somehow guide the individual who is drawing in the specific structure and content which constitutes his offering of a person (Machover, 1949).

Thus the DAP drawing maybe considered a projection of the client's own body structure, needs and conflicts. In basic terms the person drawn is the client, and the remaining sheet of surrounding paper, left clean or drawn upon, reflects the client's environment. When this drawing is finished, the client is handed a second clean sheet of the same size paper and requested to draw a person of the opposite sex from the client's first drawing. According to Machover (1949), the second drawings is considered a more

unconscious representation of the client drawn as the opposite sex, and a more accurate portrayal of the client's real self-image needs and conflicts.

Machover's clinical experience, and most heavily her psychoanalytic orientation were the bases for her interpretation of the DAP. Among her vast number of interpretational theories was that male homosexuals may reflect their sexual orientation in their drawings of the hips and buttocks in their first DAP. Machover (1949) theorized,

Both the hips and buttocks may receive undue attention in the drawings of the homosexually inclined or conflicted male. It is not uncommon to see the male figure twisted in perspective in order to focus an overdeveloped buttock. This may be seen in both nude and clothed figures, in profile and front views. Often the hip area will show confusion, a break or change of line, or particular widening, in conjunction with conspicuous treatment of the buttocks. This conflict in regard to the hips may be expressed more subtly in an accentuated horizontal flare of the bottom of a man's jacket extending

beyond the main body area, although the jacket is clearly buttoned.

Machover did not convey any further details as to why the male homosexual would draw in this way, only that he did. Machover (1949), in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality. Machover gathered her theories in clinics and hospitals over a period of 15 years and the number of perceived homosexuals she evaluated is unknown. However, it appears here is where these interpretations were stated. Other homosexual indicators noted by Machover were: the shading of lips, pants transparent (legs showing through), naked presence of sexual organs (genitals only), trousers only clothing shaded, female figure transparent below waist, male nose large, erased, and redrawn, phallic foot (length at least 3 times width and/or shaded tip), belt shaded and speared to right of figure and the presence of eye lashes.

Speculation on the largely frontal indicators and their relationship to Freud's phallic stage (penis fixation) would find agreement within psychoanalytic thought on a homosexual development (Freud, 1930; Isay, 1998). In contrast, the hip and buttock indicators, under

the same speculation, may be adjudged as a male homosexual's fixation at his anal stage, thus a separate male homosexual indicator from the other phallic stage indicators. However, to speculate on how the hip and buttock indicators were theorized when Machover (1949) does not convey any additional information can only be taken so far as a general rule.

Purpose (or Justification)

In the years since Machover (1949) put forth her ideas, clinicians have developed additional DAP hypotheses (Buck, 1948; Hammer, 1958; Levy, 1950; Schildkrout, 1972), and the use of these drawings in clinical practice has continued to grow (Riethmiller & Handler, 1998; Merritt & Kok, 1997; Wenck, 1992). Joiner & Schmidt (1998) reported that much of the research on DAP hypotheses has been poorly conducted. Many psychological examiners use DAP uncritically and make various generalizations based on its results. The question of the clinical usefulness of the drawings has resulted in a number of debates which, as a recent series of articles demonstrates, seems to continue unabated (Bardos, 1993; Gresham, 1993; Holtzman, 1993; Joiner & Schmidt, 1998; Kamphaus & Pleiss, 1993; Knoff,

1993; Motta, Little, & Tobin, 1993a, 1993b; Naglieri, 1993; Riethmiller & Handler, 1998).

The research on so called male homosexual DAP indicators of hips and buttocks yields inconsistent and often contradictory results (De Martino, 1954; Gardner, 1969; Grams & Rinder, 1958; Whitaker, 1961). This lack of consistent findings appears, maybe in part, due to inadequate research designs and over generalizations drawn from limited results (Buck, 1948; Geil, 1944; Hammer, 1958; Machover, 1949; Wenck, 1977). Most researchers used only samples that consisted of abnormal male heterosexual and homosexual groups; mental hospitals, disciplinary barracks in the Armed Services or from prisons (Barker, Mathis, & Powers; 1953; Darke & Geil, 1948; Geil, 1944; Grams & Rinder, 1958). Thus to take analysis based on a insufficient number of dated sources, (Buck, 1948; Geil, 1944; Hammer, 1958; Machover, 1949) and apply these currently in a clinical setting, could hinder the psychologist in the assessment and counseling process. Given the poor and inadequately designed research studies, the use of DAP in the proposed indicators in psychological assessments must be questioned as to their validity (Joiner & Schmidt, 1998; Merritt & Kok, 1997; Motta, Little, & Tobin, 1993; Riethmiller & Handler, 1998). Nevertheless,

DAPs are used by a majority of clinicians in their personality assessments (Riethmiller & Handler, 1998; Merritt & Kok, 1997; Piotrowki & Keller, 1989). Many psychologists have reportedly found them helpful in building rapport with a client, (Handler & Riethmiller, 1998; Wenck, 1977).

In all but a handful of states, it is legal to discriminate against individuals on the basis of sexual orientation (Walling & Donovan, 1996). The stigma of homosexuality often gives rise to psychosocial problems for the male homosexual adolescent who is in the process of sexual identity development (Rotheram-Borus, Rosario, Van-Rossem, Reid, & Gillis, 1995). This stigma complicates delivery of appropriate, ethical, and sound assessment, diagnosis, and intervention (Fontaine & Hammond, 1996). Sear's (1992) findings show that most of those individuals who should be available to help a homosexual youth in school are ill-prepared. He reported that most guidance counselors and educators felt ill-prepared to work with this population.

Garnets, Hancock, Cochran, Goodchilds, and Peplau (1991) reported a task force survey of psychologist's attitudes toward homosexuality and their bias in practice. The survey was developed to elicit instances of biased

care, as well as examples of beneficial care provided to homosexual clients. The survey indicated that 58% of the psychologists reported negative incidents, including cases in which the practitioner defined male homosexuals as "sick" and in need of change. However, the survey also showed that psychologists nevertheless are capable of providing appropriate and sensitive care to the homosexual population. Garnets et al. (1991) concluded that despite the American Psychology Association's 16-year-old nondiscrimination policy regarding homosexuality, bias and misinformation persist among many psychologist. In order to address these issues, psychological research must continue (Herek, Kimmel, Amaro, & Melton, 1991).

Meeting the educational and psychological needs of the male homosexual can challenge a psychologist's educational training in human sexuality and homophobia. For the homosexual student, family problems, violence, lack of peer support, and general abuse, can produce multiple problem behaviors in the classroom (Savin-Willians, 1994). The male homosexual's well-being and physical survival can be threatened by significant school-related problems and thus produce even greater problematic outcomes. Running away from home, conflicts with the law, substance abuse, prostitution, and suicide can be the homosexual male's only

plausible alternative to remaining in an abusive school system (Robinson, 1994). Schneider, Farberow, and Kruks (1989) report that homosexual youth are two to six times more likely to attempt suicide than heterosexual youth, and that homosexual youth account for approximately 30 percent of all successful suicides among this demographic group.

Given the poor quality and inconclusiveness of the research on the DAP, and the indicators of real or covert male homosexuality, psychologists are at risk if their judgements are based on Machover's (1949) "signs." This could lead to poor assessments and interventions. In addition, the male client who is homosexual may face considerable adversity during his educational and employment years because of institutional discrimination and may not attempt to communicate his sexual orientation with the psychologist (Robinson, 1994). Goldfried (1971) stated that a measure of homosexuality by projective means could be justified only by its ability to detect individuals who were troubled by homosexual thoughts or could not reveal this information to a clinician directly.

Due to the hidden nature of the homosexual population in the schools, and these student's increased mental-health risk factors, the psychologist can more effectively address the needs of the student if he is aware of the student's

sexual orientation (Fontaine & Hammond, 1996). In addition, the usage of DAP can facilitate discussion to bridge the gulf between the life experience of the male homosexual and those of the psychologist.

Statement of the Problem

Social and emotional isolation by the male homosexual in his environment can often be of critical importance during his psychological assessment process. Unknowingly, the psychologist may fail to address the unique concerns of the client. Without the additional information that an DAP may contribute a psychologist may be at a loss as to why a male client exhibits poor school attendance, which in turn produces poor academic performance or emotional behavior problems when in class.

Utilizing personality tests such as the DAP to interpret possible homosexual indicators from the male client, providing these indicators were accurate, would be providing valuable service to the psychologist. A psychologist may be able to address the needs of his clients more effectively and accurately, if his DAP interpretations have more credibility and validity.

Clearly lacking are studies on the drawings of the hips and buttocks by male homosexuals outside of a

restricted institutional setting. The purpose of this research study was to explore the interpretation, that attention to both the hips and buttocks drawn by male homosexual subjects in their first human figure drawing are significant indicators for their male homosexuality. Because Machover (1949), in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality, these DAPs are also included in the results.

General Hypotheses

This study will address the following question:

1) Will one-hundred, non-institutionalized, male homosexuals place more attention to either the hips or buttocks or draw a female, in their first Draw-A-Person Test when compared to one-hundred, non-institutionalized, male heterosexuals' first Draw-A-Person Test?

Ho: It is hypothesized that there will be no significant difference between the one-hundred, non-institutionalized, male homosexuals' first Draw-A-Person Test and the one-hundred, non-institutionalized, male heterosexuals' first

Draw-A-Person Test, in regard to their attention to the hips and buttocks or having drawn a female first.

H1: It is hypothesized that there will be a significant difference between the one-hundred, non-institutionalized, male homosexuals' first Draw-A-Person Test and the one-hundred, non-institutionalized, male heterosexuals' first Draw-A-Person Test, in regard to their attention to the hips and buttocks or having drawn a female first.

Delimitations (Scope) of the Study

From 1944 to 1998 no study examined the hips and buttocks indicators in DAP of non-institutionalized, overt, male homosexuals. The majority of male homosexual subjects used previously have been in institutional settings such as mental hospitals, disciplinary barracks in the Armed Services, or prisons. Therefore, it was important to investigate a non-institutional setting.

Definitions and Operational Terms

Male heterosexuality is defined: a male whose sexual interest is directed toward a female of the opposite sex (Rubin, 1965). Defined in this study by a questionnaire given to the subjects following their DAP, requesting the

subject to indicate their sexual orientation by placing a circle by around the word heterosexual, homosexual, bi-sexual with no additional definitions stated.

Male homosexuality is defined: a male whose sexual interest is directed toward another male, rather than toward a female of the opposite sex, as in the case of the male heterosexual (Rubin, 1965). Defined in this study by a questionnaire given to the subjects following their DAP, requesting the subject to indicate their sexual orientation by placing a circle around the word heterosexual, homosexual, bi-sexual with no additional definitions stated.

Male bi-sexuality is defined: a male whose sexual interest can be directed toward a male and a female of the opposite sex separately or simultaneously (Rubin, 1965). Defined in this study by a questionnaire given to the subjects following their DAP, requesting the subject to indicate their sexual orientation by placing a circle around the word heterosexual, homosexual, bi-sexual, with no additional definitions stated.

Human Figure Drawing is defined: a projective technique in which the research participant is presented with paper and pencil and asked to draw a picture of a whole person. It is used as a method to analyze

unconscious needs, conflicts, and personality traits of the person as well as a developmental test of mental maturity.

The Draw-A-Person Test is defined: a projective drawing test created by Machover (1949), in which the participant is presented with paper and pencil and asked to draw a person. It is used as a personality projective test to analyze unconscious needs, conflicts, and personality traits of the person as well as a developmental test of mental maturity.

Assumptions

Because Machover (1949) in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject was also a diagnostic criteria for male homosexuality, it was an assumption that some males may draw a female first, these DAPs were also included in the results.

It was assumed that the subjects would answer the questionnaire truthfully. There was an assumption that the volunteers would write the truth about their sexuality. In addition it was assumed that the subjects would draw their DAPs to the best of their ability in a timely manner.

Summary

In conclusion, because of the inconsistency of the H1:0 interpretation of the hips and buttocks as indicators of male homosexuality, there was a need for further study. All of the DAPs prior research on male homosexuality have used men from a prison, hospital, clinic, or from the private offices of psychologists. This researcher questions the validity of these prior studies when generalized to the male homosexual population at present. This study attempted to locate and sample the overt male homosexual within an urban environment, free from the confines of an institutional and homosexual treatment setting. In addition, unlike previous studies, the subject volunteered his services unaware of his sexual orientation as a prevalent factor, once finished with his DAP, he was then given the questionnaire. It was this attempt at a more random sample of the overt male homosexual that in turn produced a more reliable study of the hip and buttocks in the DAPs as indicators for the male homosexual.

Refinement, validation and correction for these findings would prove to be of assistance to the psychologist when forming an interpretation of male homosexuality. The psychologist would be able to provide a more comprehensive personality assessment. The Draw-A-

Person test could enter into the general personality assessment, when accurate interpretations have been conducted; with reliable datum that has been researched with a normally adjusted population, from a non-institutional setting, at the time of this study.

This research study was to explore the interpretation of the hips and buttocks as male homosexual indicators in their first DAP. This research study attempted to explore the interpretation stated by prior research that the attention to the hip and buttocks in a male's first DAP are indicators for male homosexuality. Because Machover (1949) in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject was also a diagnostic criteria for male homosexuality, these DAPs were also included in the results. It was assumed that by attempting to confirm these indicators, the reliability for DAP interpretation would be strengthened.

Chapter 2

REVIEW OF THE LITERATURE

Psychoanalytic Theory and Homosexuality

Psychoanalytic theory arose from speculation based upon clinical observation of client populations. This theoretical speculation emphasized the influence of early childhood experiences upon sexual behavior. Homosexuality was viewed as being a result of the early relationship of the child with parents and siblings, usually pathological relationships (Bieber, 1962; Freud, 1930; Marmor, 1965). Specifically, Bieber (1962) proposed that the typical etiology of the homosexual male included a close-binding-intimate mother and a hostile-detached father. He proposed that a warm and affectionate relationship with the father precluded the son from developing a homosexual orientation. Other analysts have proposed that a lack of separation and

individuation on the part of the son from his mother and a fear of engulfment by the mother are predisposing factors in homosexuality (Sociarides, 1968). In a reformulation of his theory of the origins of homosexuality with the pre-oedipal form depicting the persistently and predominantly homosexual male. The male was characterized by a primarily feminine identification, a fear of engulfment by the mother and a fear of castration. It should be remembered, however, that Freud (1930), the father of psychoanalysis, proposed that the genes played some role in the development of homosexual orientation and that the environment played an important role in its development.

Within much of the human figure drawing (HFD) literature, the researcher is often hunting for the "female composite" drawn by the presumed male homosexual (Geil, 1944). In addition, it appears that too many theories put forward by psychologists may have overgeneralized on the basis of their HFD and clinical, psychoanalytic experience (Buck, 1948; Levy, 1950; Hammer, 1958; Machover, 1949), indicating a limited view of homosexuality directed toward populations within mental hospitals or prison structures.

As a result, most of the related research is defined by the period in which it was conducted. That is, male

homosexuality was seen as a symptom of mental disease, as a personality disturbance, as a neurosis, or as a fixated infantile level of psychosexual development (Anderson, 1975; Rubin, 1965). In this one respect, the psychodynamic literature indicates being very narrow (Anderson, 1975). Nevertheless, it is essential to present the psychodynamic theoretical background of DAP to give the reader an understanding of how the interpretation of hips and buttocks came to be an indicator of male homosexuality.

In addition, it is essential to present the pre-existing research on the validity of DAP to justify to the reader its popular and controversial place in personality assessment.

Theoretical Background

Human Figure Drawings are generally employed either as a measure of mental maturity, or as a projective technique for personality assessment (Riethmiller & Hander, 1998; Merritt & Kok, 1997). Kellogg (1959) postulated that the structure of a young child's drawing is determined by age and level of maturation, but the style of the drawing reflects the attitudes and concerns that are important to the child at the time.

Graphic art has been used in various ways for studying the psychology of normal and abnormal behavior of both children and adults. Goodenough (1926) and other clinicians became aware of the possibilities that these drawings were tapping features of the child's personality along with mental endowment. Bender (1937) believed that "art presents an opportunity to express instinctual impulses in a form socially acceptable, and can reveal the fantasies and unconscious life of a child not only to himself but to the psychiatrist." Bender (1940) further stated, "the drawing of a child is an experiment in the visual motor interpretation of the integrated pattern of the kinesthetic, motor, cutaneous and visual impression." Consistent with this formulation, Fingert, Kagan, and Schilder (1939) wrote: "we can, therefore, regard the Goodenough Test (1926) as an expression of total tendencies." Bender (1939) relates, "The body image is build up as a maturation process by a gestalt integration of all sensory, motor and social experiences of the child." Furthermore, she had stated earlier (1934):

There is a concept of the body image that is socially determined. One sees and otherwise experiences the body image of other people. There are many variations

in the body types, but one becomes acquainted with these and in one way or another identifies himself with them so that they become a part of one's own composite body image.

Buck (1948) developed the use for children's drawing as a projective technique. He specified a house, tree, and person to be drawn because they are items familiar to children and generate richer verbal spontaneity than other items. Machover began using the DAP with adults as a projective measure but later extended the use to children (1949).

Machover (1949) indicated that the drawing of a person involves a projection of body image and is a vehicle for expressing one's body needs and conflicts:

The human figure drawn by an individual who is directed to draw a person relates intimately to the impulses, anxieties, conflicts, and compensations characteristic of that individual. In some sense, the figure drawn is the person, and the paper is the environment. (p. 35)

Each of the drawings may be considered within the context of a self-portrait reflecting a variety of characteristics, such as the subject's feeling of adequacy and contentment,

accessibility, degree of reality testing and sexual role. The behavior of the subject during the drawing can yield as much information as the actual product. When confronted with an unstructured test, reluctance or eagerness in pursuing the task, dependency needs, unimpulsive, tenseness, and insecurities may appear (Gabel, Oster, Butnik, 1986).

Levy noted (1950) that projective psychology assumes that no behavior is accidental; all behavior is determined. The determinants, however, are usually multiple and of varying degrees of accessibility, thus complicating the task of analysis. He concluded that a drawing may be a projection of self-concept, a projection of attitudes toward someone else in the environment, a projection of ideal self-image, a result of external circumstance, an expression of habit patterns, an expression of emotional tone, or a projection of the subject's attitudes toward life and society in general. It is usually a combination of all of these. Furthermore, he stated that a drawing may be a conscious expression, or it may include deeply disguised symbols expressive of unconscious phenomena.

Hammer (1958) stated that in projective drawings, the subject's psychomotor activities are caught on paper. The

line employed may be firm or timid, uncertain, hesitant or bold, or it may consist of a savage digging at the paper. In addition, the subject's conscious and unconscious perception of himself and significant people in his environment determine the content of his drawings. In such expression, the unconscious levels of the subject tend to utilize symbols, symbols whose meanings can be unraveled through study and understanding of dreams, myths, folklore, psychotic productions, and so on.

In general, Hammer felt the drawing page serves as a canvas upon which the subject may sketch a glimpse of his inner world, his traits and attitudes, his behavioral characteristics, his personality strengths and weaknesses, including the degree to which he can mobilize his inner resources to handle his psychodynamic conflicts, both interpersonal and intrapsychic.

Harris (1963) also proposed that the distortion found in self-drawings may be literal or symbolic representations of the artist's self-image. However, Wenck (1977) states no singular characteristic should be held as conclusive indicators of the presence of certain personality traits; rather, the configurational pattern consisting of many signs should be considered.

In conclusion, wide agreement exists within psychoanalytic circles that HFD are primarily a manifestation of the subjects perception of himself or the self he wishes to be.

Validity of HFD

Studies using HFD as projective techniques do not yield the types of consistent relationships seen between HFD, development, and academic achievement. The popularity of HFD as a projective technique has not been supported by consistent research findings (Riethmiller & Handler, 1998). Two reviews of literature on the interpretation of HFD ended with contradictory conclusions. Roback's (1968) review emphasized that there is a great need for standardized scales for estimating personality adjustment from HFD. He was critical that, in the clinical setting, interpretations of HFD are usually impressionistic, based upon a global, or over-all, assessment of the data. He also indicated that these interpretations are often swayed by the artistic quality of the drawing.

Swenson (1968) conducted a review of the same literature and came to the conclusion that global ratings of personality traits are the most reliable, and therefore, the most useful aspects of HFD. He found the reliability

of global measures, for the most part, to be over .80, but that the reliability for the various structural and formal aspects generally varied between .30 and .51. He attributed the inconsistency of the HFD research to a lack of reliable scoring factors. He concluded that structural and content variables have reliabilities that are probably too low for making reasonably reliable clinical judgements. Other investigations have also yielded positive results when employing a global rating system as opposed to item specific analysis. Burton and Sjoberg (1964) used naive observers (artists and surgeons) as well as clinical psychologists to evaluate the drawings of schizophrenics. The judges found an impaired holistic integration of the person reflected in their drawings. Hiler and Nesvig (1965) found four valid criteria for pathology: bizarre, distorted, incomplete, and transparent. The valid criteria for normals were happy expression and nothing pathological. Stricker (1967) found that clinicians who used Hiler and Nesvig's global scoring system were more accurate in predicting psychopathology than persons using scoring systems for specific items.

Wanderer (1969) and Watson (1967) found that HFD can be used to identify mental defectives but cannot be used to differentiate between schizophrenics, neurotics,

homosexuals, or normals. Hammer (1969) rebutted Wanderer's study on the basis of methodological errors and clinical considerations. He stated that it is unfair to use such a small projective sample (one drawing) in making a blind interpretation. He equated this to being limited to using only one or two Rorschach cards or the first few questions on the MMPI with the task of placing an individual in a diagnostic category. Hammer proposed that drawing techniques needed to be expanded to more samples to provide more clinical data.

Riethmiller and Handler (1998) provided a defense of the use of HFD and made suggestions for future research. He stated that HFD are a useful psychodiagnostic tool when they are used in conjunction with other tests to help in better understanding an individual's internal conflicts and aiding in prediction of behavior and choice of therapy. He complained that most HFD research has equated validity with the ability of HFD analysis to classify groups of patients as abnormal or normal.

Falk (1981) also reported that most HFD research has been done on adult populations even though children are the most appropriate target. Drawing is a natural activity for children; they become absorbed in doing drawings, and they

have a greater tendency than adults do to communicate clues about how they feel and think through nonverbal channels. On the other hand, many adults feel foolish doing a drawing or are overly preoccupied with trying to determine what the psychologist is going to read into their drawing. Falk and Riethmiller and Handler suggested future research should establish exactly which aspects of HFD are valuable and how they can be standardized and employed for greater utility.

In summary, both global scoring methods and item analysis of specific HFD factors have yielded inconsistent results for the use of HFD as projective measures. Much of the discrepancy appears to be due to methodological differences in the research designs. Due to the positive findings of a substantial number of studies attempting to use HFD as projective measures, it seems justifiable to view HFD analysis as a useful aid in understanding the dynamics of an individual personality, particularly when used in conjunction with other forms of evaluations.

Analysis of the Hips and Buttocks as Indicators for Male Homosexuality in HFD

The relationship between male homosexuality, HFD and individual drawing signs with pattern analysis has been the focus of considerable research and theorizing since the

mid-1940s (Buck, 1948; Darke & Geil, 1948; Geil, 1944; Levy, 1950; Machover, 1949). There have been many attempts to classify a subject's homosexuality using various drawing patterns analysis from HFD (Grams & Rinder, 1958; Hammer, 1958; Machover, 1949). The popularity of HFD as a measure of male homosexuality has not been supported by consistent research findings (Gardner, 1969, Grams & Rinder, 1958, Vilhotti, 1958). A survey of the literature comparing HFD with various self-report and self-concept measures yields inconsistent and often contradictory results. Much of this inconsistency appears to be due to the differences in research designs and psychoanalytic analysis (Buck, 1948; Darke & Geil, 1948; Gardner, 1969; Geil, 1944; Grams & Rinder, 1958; Hammer, 1958; Levy, 1950; Machover, 1949; Roback, Langevin, & Zajac, 1974).

Traditionally, several individual signs as well as patterns of signs have been used to predict male homosexuality (Grams & Rinder, 1958; Machover, 1949). For the majority of these researchers it is this author's assumption that they were strongly influenced by traditional Freudian psychoanalysis which has provided the most widely accepted view of the origin and nature of male homosexuality (Isay, 1998). The theory holds that for the male who has a sexual interest toward another male, is the

result of a binding, enveloping, overprotective mother, who, for whatever reason, had kept him from being close to and identifying with his father. Or, the male care-giver may have been emotionally cold or physically non-existent (Isay, 1993).

These two scenarios have caused the male child to turn to the mother and identify with her. "In both theories the male child has been 'feminized' by identifying with his mother instead of his father, and, at about age five or six, at the time of oedipal crisis, he deviated from 'normal' heterosexuality and was on the perverted path of desiring other men instead of woman (Isay, 1998). Psychoanalytic analysis theorized that because male homosexuals have associations of shame and a fixation with their own body parts (buttocks and hips), they would emphasize this onto their first Draw-A-Person Test (Machover, 1949).

Geil(1944) found that in light of Bender's (1937, 1940) statements, the Goodenough Test (1926) appeared to be an excellent tool for permitting a projection of inner dynamic tendencies. Based on his collection of eight-hundred-and-one HFD done by males subjects at a medical center for federal prisoners, Geil (1944) concluded a number of hypotheses. While Geil (1944) felt that not all

male homosexuals would draw a man with feminine characteristics, he discovered that whenever one encounters a male subject who draws a man with feminine characteristics (such as large eyes with lashes, "cupid's bow" mouth, delicate nose, curved figure, graceful posturing, small hands and feet) it is a highly significant indication of a strong feminine component in the male subject's personality structure.

Geil(1944) concluded that homosexuals would be good subjects for further studies since they project their inner homosexual tendencies in their pictorial representations of the male adult human figure. He theorized that many of them tend to live at an immature emotional level, like children, and are more apt to project in a graphic manner these inner tendencies than would more mature subjects.

Drake and Geil(1948) concluded, after testing one-hundred male homosexuals selected from the population at a medical center for federal prisoners, that the Goodenough Drawings-A-Man Test (1926) was a clinically valuable projective technique in the study of male homosexuality. Results indicated that overall trend of the data showed a correlative decrease in feminism in the drawings with a decrease in the degree of active homosexuality. This provided evidence to them that when feminine traits were

projected, then there was an increase in the homosexual activity. Therefore, they felt that the degree, or role, of homosexual activity was able to be indicated in these drawings and was projected in a way which may be of clinical value in studying homosexuality, active or latent.

Machover's (1949) most basic assumption is that the figure drawn is the person, and he is projecting himself in all of the body meanings and attitudes of this body image. Thus the psychologist should be able to extract from the graphic product what the subject has put into it. It is here that the author's proposal study is concerned, and challenges one of Machover's miscellaneous body features: the Hips and Buttocks, which are stated by Machover (1949) as indicators of the homosexually inclined.

"It is not uncommon to see the male figure twisted in perspective in order to focus an overdeveloped buttock. This may be seen in both nude and clothed figures, in profile and front views. Often the hip area will show confusion, a break or change of line, or particular widening, in conjunction with conspicuous treatment of the buttocks. This conflict in regard to the hips may be expressed more subtly in an accentuated horizontal flare of the bottom of a man's jacket, extending beyond the main

body area, although the jacket is clearly buttoned" (Machover, 1949).

Machover (1949) had a wide variety of clinical material gathered in clinics and hospitals for mental observation over a period of fifteen years. It is unknown the number of known or perceived homosexuals she evaluated. However, it was during this work with clinical population of homosexuals that she developed her hypotheses regarding homosexual indicators.

Levy (1950) reported that of five-thousand adult subjects, 87% drew their own sex first. He further reported that in a sample of sixteen overt homosexuals, thirteen drew the opposite sex first. Levy theorized sexual conflicts, as in homosexuals, will omit or distort the areas associated with sexual parts. He states, "if the hip and buttocks of the male figure are rounded and larger than they should be or given an unusual amount of attention, the subject may have strong homosexual trends."

Other indicators were: the hair was given a great deal of attention and care; the lips were full and sensuous; the trunk is rounded or wasp-waisted; attention is given to the drawing of the tie; and the eyes were very large with lashes, Levy wrote "the subject is almost surely a homosexual," if they have drawn those indicators. It

should be noted, however, that he doesn't describe his adult population nor his homosexual group by the proportion of male and female subjects. This omission makes whatever conclusion are drawn ambiguous (Mainford, 1953).

Barker, Mathis, & Powers (1953) used the Machover (1949) DAP within an army hospital setting to evaluate drawing characteristics of male homosexuals. They concluded that many of the HFD indicators of male homosexuality referred to in the psychological literature (Geil 1944; Levy, 1950; and Machover 1949) were not characteristic for a group of male homosexual soldiers. In addition the writers believed that the Machover drawing technique was a method uniquely suited for the study of personality traits of the civilian male homosexual, and not for homosexual soldiers.

DeMartino (1954) investigated the male HFD characteristics of institutionalized mentally retarded males. He then compared the HFD of thirty-seven heterosexual mentally retarded males to the HFD of thirty-seven mentally retarded homosexual males. Subjects were asked to draw a person. Then following that task, they were asked to draw a person of opposite sex. All HFD were analyzed in terms of frequency according to certain

predetermined characteristics found by Barker, Mathis, & Powers (1953); Geil (1944); Levy (1950); Machover (1949). Notable findings regarding the HFD by homosexuals were that most subjects drew their own sex first. In addition, high heels and eyelashes appeared significantly more in homosexual HFD than in the drawings of non-homosexuals. In conclusion, DeMartino found various discrepancies in many of the predetermined homosexual indicators, and stated additional research was needed before conclusive statements could be made regarding HFD by homosexuals.

Vilhotti (1958) obtained fifty male homosexuals HFD and fifty male heterosexual HFD from a institutionalized mentally deficient population. The results of the study indicated that the sign of drawing a female figure first as diagnostic of male homosexuality is not useful with this population. In addition Vilhotti found it was quite difficult to differentiate most of the foregoing signs previously mentioned by Barker & Mathis (1953), Darke & Geil (1948), Geil (1944), Levy (1950) and Machover (1949) without the use of a good deal of subjectivity on the part of the examiner.

Grams & Rinder (1958) investigated the validity of fifteen signs in DAP which Machover (1949) listed as

predictive of homosexuality. Fifty adolescent inmates of a state training school were divided on the basis of homosexual experience into two groups matched for age, schooling, IQ and race. Each subject was asked to draw a person, and then to draw a person whose sex is opposite of the first drawn figure. Machover's (1949) signs were stated objectively as follows:

1. Ear large or heavily lined or much detail
2. Detectable delineation of hips or buttocks
3. Failure to complete drawing below the waist
4. Heavy line of demarcation at waist
5. Failure to draw "V" of crotch
6. Presence of shading on lips
7. Pants transparent (legs showing through)
8. Naked presence of sexual organs (genitals only)
9. Trousers only clothing shaded
10. Female figure transparent below waist
11. Male nose large, erased, and redrawn
12. Phallic foot (length at least 3 times width and/or shaded tip)
13. Belt shaded and speared to right of figure
14. Presence of eye lashes
15. Drawing of female figure first

Grams & Rinder (1958) concluded that neither individually nor collectively did the 15 signs studied validly predict the criterion of homosexuality.

Hammer (1958) concluded from his studies of male homosexuals, "if the hip and buttocks of the male figure are rounded and larger than they should be or given an unusual amount of attention, the subject may have strong homosexual trends." However, he does not indicate the

number of male homosexuals tested nor his sampling procedure.

Machover (1959) proposed to investigate the incidence of homosexual trends among alcoholics. She selected homosexuality for the study because of the presumed frequency with which homosexuals in general, encountered problems as alcoholics and because of its dynamic implications in explanations of the etiology of alcoholism. The hypotheses of the study were that homosexual alcoholics will show, on appropriate tests, more evidence of homosexual drawing trends (body concerns, posturing, exhibitionistic display, sexual preoccupation) than will their nonalcoholic, non homosexual peers in age, education, intelligence and ethnic background. Second, it was hypothesized that homosexual drawing indicators may be more evident among remitted than among unremitted alcoholics. The overall data rejected the first hypothesis and confirmed the second hypothesis.

Whitaker (1961) found a significant relationship between using an extended Machover's (1949) DAP to identify homosexual and effeminate men. The extended DAP is similar to the DAP, with the only exception being that a third drawing of a person is now requested by the examiner. The

extended DAP can produce for the male subject two female and one male HFD, or two male and one female HFD. It was theorized that the male homosexual subject would draw two female and one male HFD. Two hundred and thirty-six men, referred to a court clinic, were rated on the characteristics of homosexuality and effeminacy by a clinical psychologist (Whitaker, 1961).

The results supported the theoretical expectation, based on psychoanalytic and projective test concepts of psychosexual identity, that psychosexual identity is projected into third HFD as a free choice drawings. Thus the author found significantly that the labeled effeminate homosexual drew two female drawing out of three in the extended DAP. The author suggested that the extended DAP be used in other setting where cross-validation data could be obtained.

Houston (1965) administered HFD to eighty incarcerated youthful homosexuals and one-hundred and ten incarcerated non-homosexuals. He concluded that the homosexual subjects drew the female as the first figure to a statistically significant degree. He stated that these results suggested that a nonverbal interest inventory may reveal those aspects of personality organization which traditional

projective devices and verbal interest inventories have in the past been unable to detect.

Gardner (1969) studied the HFD indicators of homosexuality in the drawings of twenty-seven heroin subjects and twenty-five pill using addicts. From his findings, from which he found no significant differences he concluded. "The practice of accepting theoretical claims which have been empirically negated seems particularly dangerous...homosexuality hypothesis as well as a great many other theoretical assumptions underlying the DAP (and other tests as well) must be laid to rest if the empirical research consistently fails to support them."

Pustel, Sternlicht, and Deutsch (1971) attempted to determine whether eighteen pairs composed of adolescent and adult institutionalized mentally retarded male homosexuals would project a feminine tendency in their HFD. They concluded the subjects did have a marked presence of a strong feminine composite in their HFD. In addition, the feminine composite was more pronounced among the subjects they found more passive than active as homosexuals.

Schildkrout (1972) concluded from her studies of HFD that emphasis on the knees, and omission of the feet are

indicative of homosexual impulses. However, she does not indicate the number of homosexuals tested nor her sampling procedure.

Sreedhar and Rao (1973) reported observations on the administration of the DAP with two male homosexuals. Although their findings are solely based on theoretical observations, without adequate experimental rigor or appropriate statistical analysis, they do suggest that various individual signs of the DAP were indicative of the homosexuality evinced in the two subjects they studied.

Roback, Langevin, & Zajac (1974) reported their finding from investigating the relationship between homosexuality, gender identity and the extended DAP (Whitaker, 1961). Their study was the first to use paid, non-institutionalized male and female homosexual and heterosexual subjects (twenty-one male homosexual subjects; twenty-two male heterosexual subjects; thirteen female heterosexual subjects; thirteen female heterosexual subjects). Both relationships were found to be statistically nonsignificant with non-institutionalized homosexuals.

Wench(1977) edited a professional diagnostic handbook for examiners which states HFD diagnostic interpretations,

many with pictorial examples of the characteristics. Buttocks emphasized (p. 67) with a pictorial example, as an indicator of male homosexuality is credited to DiLeo (1973) and Hammer (1958). Whereas hips are listed an indicator of male homosexuality, they are without an HFD pictorial example, but are referenced to Geil (1944), Levy, (1950) and Machover (1949). This handbook is in its ninth printing (1992) and continues the usage of the interpretation of hips and buttocks as indicators for male homosexuality.

In summary, item analysis of specific indicators for male homosexuality in HFD have yielded inconsistent results. Much of the discrepancy appears to be due to methodological differences in the research designs. It seems justifiable to view HFD analysis as a useful aid in understanding the dynamics of an individual personality, particularly when used in conjunction with other forms of evaluations. However, there is clearly room for a study exploring the interpretation of hips and buttocks as male homosexual indicators with 100, non-institutional, overt, male, homosexual subjects. This additional well-designed research will do much to make the HFD more useful in psychological evaluation.

Chapter 3

RESEARCH DESIGN AND METHOD

This research was designed to determine if self-acknowledged male homosexual subjects place more attention on either the hips, buttocks or both, in their first male Draw-A-Person Test (DAP) as compared to self-acknowledged male heterosexual subjects. Because Machover (1949) in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality, this criteria will also be included in the results. In order to determine if the subjects emphasize both the hips and buttocks in their DAPs, three psychologists who have met the researcher's criteria will search for these indicators without prior knowledge of the subject's sexual orientation in a double-blind study.

The adult male heterosexual population was selected from a metropolitan college campus. The adult male homosexual subjects were recruited at a metropolitan community center and bookstore specifically targeted to the homosexual population. The two groups were compared on each of the five hip and buttocks indicators as proposed by Machover (1949) DAP, as a visual classifying system for the hypothesis of male homosexuality. These rules of interpretation involving the qualitative aspects of the DAP were derived from the author's clinical experience as well as a variety of rational considerations, most of which reflect a psychoanalytic orientation.

No study has examined the hips and buttocks indicators in DAPs of non-institutionalized, covert, male homosexuals. The majority of male homosexual subjects used previously have been in institutional settings such as mental hospitals, disciplinary barracks in the Armed Services, or prisons. Therefore, it is important to investigate a non-institutional setting.

Reliability statistics appropriate for the data format will be presented. In the case of the five hip and buttocks categories the indicators are dichotomies (present/absent). With this dichotomous data, and having

more than two raters, Interclass correlation coefficient (ICC) will be used as the measure of the inter-rater reliability (Bartko & Carpenter, 1976). Once the inter-rater reliability has been established, a chi-square test of association will be used as a reliability measure for this research proposal (Bartko & Carpenter, 1976).

The following sections will describe the methods used to analyze the findings. The sections are organized under the following subheadings: research participants, data collection procedures, training of raters, the limitations, and data analysis procedures.

Research Participants

The sampling of research participants were selected from at least 100 male self-acknowledged homosexual subjects attending the Lesbian and Gay Community Services Center, at 208 West 13th Street, New York City, New York and A Different Light Bookstore at West 18th Street, New York City, New York. The heterosexual male comparison group was selected from Hunter College University campus, at 64th Street, New York, New York and from New York University, at University Place, New York, New York. If male self-acknowledged homosexual subjects were found to be in the Hunter College or New York University sample they

were also included in this study. This accounted for 5 out of 100 or 5% of the homosexual sample.

A decision was made to include a minimum of 100 males in each group so that the total number of subjects would be at least 200. Past research had been small in numbers and a study with a larger number was indicated to give a more accurate view of the homosexual population. The research participants for this study range in age from 18 to 65 years of age. This age range was selected because Machover (1949) considered this same age range in her clinical work on the DAP.

Data Collection Procedures

The researcher was seated behind a table with a sign-board which stated the identifying information for the dissertation (see APPENDIX A). The sign was deliberately vague so as not to frighten or intimidate potential subjects. In front of the researcher's table were two chairs. The table was placed near the front entrance of all establishments mentioned. On the table was the sign-board and a box on the table displaying snack food items.

All subjects were informed that participation was confidential (their DAPs were coded by a number, along with their check-off sheet; they could not identify their DAPs

by signing their name). In this way each subject had complete confidentiality. The subjects were informed that participation was voluntary and that they could choose not to participate at any point during the study. They were informed that this study was concerned with the perceptions of the human form as drawn by males and females (female is used as a distraction). For their participation they received a food snack upon completing the task. If the subject wished, he could leave his identifying information in order to receive a summary of the research on group outcomes, which the researcher would send upon the completion of the dissertation.

In this study, the subject was given a pencil and an 8 1/2" X 11" inch sheet of blank white paper, on which he was instructed to, "draw a person." It was explained that the drawing should replicate the image of a human being to the best of his ability. The researcher will also indicated that a stick figure was not acceptable. When the drawing was completed, the examiner asked the subject to write the gender of the person he had just drawn in the upper left corner of the paper. Each subject was then asked by the examiner to draw a person of the sex opposite of the person they have just drawn, using the same criteria. When the drawing was completed the examiner asked the subject to

write the gender of drawing #2 in the left corner. The subject was then given a third sheet of paper. This was a checklist to collect demographic information about each subject in the sample.

The respondent was requested to indicate personal confidential information regarding: Gender (Female, Male); Ethnicity (African-American, Asian, Hispanic, Caucasian, or Other); Age (<18, 18-25, 26-35, 36-45, >46); Residence (Manhattan, Bronx, Brooklyn, Queens, New Jersey, Staten Island, other); Sexual Orientation (heterosexual, homosexual, bi-sexual, other); Educational Level (Some high school, High school graduate, Undergraduate Degree, Masters Degree, Above Master Degree, PhD, MD, DDS, DO).

There was a debriefing discussion with the male subject to explain the general purpose of the research. If any subject was upset about any of the research, his data was pulled and destroyed, his complaint was recorded and a copy forwarded to the doctoral committee and department. The subject was also given the right to complain anonymously and was provided with the researcher's name and mailing address. However, there were no complaints.

Training of Raters

The three raters were selected based on the researcher's criteria. They were doctoral level, licensed New York State psychologists. They had at least eight years of clinical and school experience working in the field of psychology with HFD as well as other projective testing which reflects a psychoanalytic orientation. They worked in the same New York City college. They were two males and one female, in the 35 to 50 age range, who volunteered to help this research project. Although the raters here were sophisticated in projective testing, studies have found that sophisticated raters are no better than naive raters in their ability to classify DAPs when the naive raters are correctly trained (Artkell, 1976; Hiler & Nesvig, 1965; Levenberg, 1975; Schaeffer, 1964; Stricker, 1967).

The raters were trained in the use of the Machover's (1949) DAP interpretation of hips and buttocks as indicators for male homosexuality. This training had taken place during two sessions of two hours each. Each rater was given a copy of the Machover book, Personality Projection in the Drawing of the Human Figure. The raters read the book and discussed the classifying criteria with

the researcher. To facilitate the rater's classifying criteria, the researcher drew the buttock and hip signs that are representative of Machover's (1949) male homosexual interpretation (see APPENDIX B) as a visual guide. Based on Levenberg's (1975) work in professional training for DAP judgement, it is hypothesized that with increased professional training, the raters would be better able to detect homosexual indicators. It was also hypothesized that with increased professional training, raters would be better able to perform with a degree of accuracy greater than chance (Murray & Deabler, 1958).

Based on the results reported by Machover (1949), it was anticipated that five hip and buttock categories would form the researcher's scoring system (see APPENDIX C). The visual illustrations were diagramed by the researcher and the raters selected any drawings in their blind selection of the homosexual and heterosexual DAPs that fit the diagram based on Machover's (1949) description. The double-blind approach was to minimize the experimental bias (Riethmiller & Handler, 1998).

The raters together and the researcher classified a sample group of four DAP not included among those in the study sample. As these DAP were classified, the researcher

and the raters discussed the classifying criteria for each. Any disagreements or discrepancies regarding the classifying of a DAP was discussed and resolved by a vote (Levenberg, 1975; Riethmiller & Handler, 1998).

To test for the inter-rater reliability, an additional set of 20 DAP (not included among those in the study sample) were classified independently by the researcher and by each of the raters. For each of the 20 DAP, the percent of the agreement, Absent (coded 0) and Present (coded 1) was calculated. With these dichotomous data, and having more than 2 raters, Interclass correlation coefficient (ICC) was used as the measure of the inter-rater reliability (Bartko & Carpenter, 1976).

Once the researcher obtained the experimental data and the raters were judged to have a high inter-rater reliability (an agreement of 100%) the three raters classified independently random samples of 20 DAPs from each of the two actual study groups (homosexual males and non-homosexual males). Inter-rater reliability for the actual study group was established once again by calculating the percentage of agreement between the three raters using the Interclass correlation coefficient. An agreement of 100 percent was achieved before the raters

continued. The remaining un-classified protocols of 180 were then classified by the raters. This was consistent with Harris's (1963) and Levenberg's (1975) findings that, after a relatively brief training, inter-rater reliability is exceedingly high for a well articulated and precisely specified rating procedure.

Limitation

This study will be limited to urban, male volunteers who read and may attend college in New York City, which may be unrepresentative of the wider male heterosexual and homosexual community.

Treatment and Analysis of Data

This study focused on the characteristics of the hip and buttocks area in DAPs used by Machover (1949) as indicators for male homosexuality from her DAP clinical research. It attempted to differentiate the first drawings of male homosexuals from male heterosexuals. Because Machover (1949), in addition to the hip and buttocks, indicated that the drawing of a female figure first by a male subject was also a diagnostic criteria for male homosexuality, these DAPs were also included in the results. This study was designed to achieve two goals:

1. To determine which if any of the hip and buttock indicators or drawing a female first, significantly differentiate the drawings of the two groups.
2. To determine whether or not the classification procedure is accurate enough to be useful as a clinical assessment tool for male homosexuality.

The two groups were compared on each of the five hip and buttocks indicators as mentioned by Machover (1949) as a visual dichotomous classification system for male homosexuality. The analyses was applied to compare the male self-acknowledged homosexual subjects hips and buttocks to the male self-acknowledged heterosexual subjects. The visual illustrations were diagramed by the researcher and the raters selected any drawings in their blind selection of the homosexual and heterosexual DAPs that fit the diagram based on Machover's (1949) description. The double-blind approach was to minimize the experimental bias (Riethmiller & Handler, 1998).

Chi-square test of association statistics was calculated to determine the significance of group differences, which has been a widely used calculation with DAP (Levenberg, 1975; Riethmiller & Handler, 1998). The

five hip and buttocks homosexual indicators as seen by the raters were dichotomies (Absent=0/Present=1), as were any first drawing of a female. Bartko & Carpenter (1976) suggest Chi-square as a measure of reliability when using dichotomies. In addition with this dichotomous data, and having more than 2 raters, Interclass correlation coefficient (ICC) were used as the measure of the inter-rater reliability (Bartko & Carpenter, 1976).

Chapter 4

THE RESULTS

The purpose of this research study was to explore the Machover (1949) interpretation that attention to both the hips and buttocks drawn by male subjects in their first male DAP drawing are significant indicators for male homosexuality. Because Machover (1949) indicated that in addition to the hip and buttocks, the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality, these DAPs then were also included in the results.

A secondary purpose was to determine whether or not the DAP developed by Machover (1949) were accurate enough to be useful as a clinical assessment tool for male homosexuality. In spite of the relative lack of data and information (Buck, 1948; DeLeo, 1973; Levy, 1950; Hammer, 1958; Wench, 1992), many clinical workers over the years

have tended to adopt it uncritically and have made sweeping generalizations concerning its applicability and significance (Joiner & Schmidt, 1998).

The majority of male homosexual subjects used in DAPs and HFDs research studies have been previously completed in institutional settings such as mental hospitals, disciplinary barracks in the Armed Services, or prisons. For many of the male subjects, their homosexuality seemed to be the sole reason for their restrictive setting (Buck, 1948; DeLeo, 1973; Geil, 1944; Hammer, 1958; Levy, 1950; Machover, 1949). Therefore, it was important for this researcher to investigate the male overt homosexual DAPs from a non-institutional, urban setting. It could be speculated that today's urban, overt, male homosexual would be less likely to be subjected to arrest or imprisonment due to their acknowledged sexual orientation, thus allowing a random sample to be possible in a more accepting environment.

In this chapter the results of the study are presented. The chapter begins with a comparison of the male heterosexual and homosexual groups on demographic variables. The second section presents frequency distributions on the five Machover classification

categories for the hip and buttocks area for the drawings of the males in the heterosexual and homosexual groups. In addition, frequency distributions from the males in the heterosexual and homosexual groups who drew a female first are also presented. Finally, both Machover (1949) male homosexual indicators are then totaled and presented in a frequency distribution.

Comparison of the Heterosexual and Homosexual Male Groups

The sample consisted of the first human figure drawings of 100 non-institutionalized, heterosexual males and 100 non-institutionalized, homosexual males. As previously mentioned, prior research on male homosexuality was conducted from an institutional setting. Thus, the sampling of volunteer research participants were from 100 male self-acknowledged homosexual subjects attending the Lesbian and Gay Community Services Center, at 208 West 13th Street, New York City, New York and A Different Light Bookstore at West 18th Street, New York City, New York. The majority of the heterosexual male comparison groups were volunteers from Hunter College University campus, at 64th Street, New York, New York and from New York University Washington Square campus, New York, New York.

When male self-acknowledged homosexual subjects were found to be in the predominately heterosexual Hunter College or New York University sample they were then also placed in their appropriate group. This accounted for 5 out of 100 or 5% of the homosexual sample. Typical of a random male homosexual population in the United States, research data still varies somewhere between 3% and 10% within a male heterosexual population (Katz, 1983).

Table 1 indicates the number of heterosexual and homosexual males from each of the four facilities. The data in Table 1 indicates that for heterosexual males 50% of the subjects were from Hunter College and 50% were from New York University. For homosexual males 70% of the subjects were from A Different Light Book Store; and 20% were from the Lesbian and Gay Community Services Center. Five percent of homosexual male subjects were from Hunter College as well as 5% from New York University.

Table 1

Heterosexual and Homosexual Males
From Each of the Four Facilities
(N=200)

Facility	Heterosexual Males	Homosexual Males
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A Different Light Book Store		70
Hunter College	50	5
Lesbian and Gay Community Services Center		20
New York University	50	5
<hr/>		
Total	100	100
<hr/>		

The questionnaires from these male subjects were used to obtain a number of background and demographic variables. The male subjects were requested to indicate personal and confidential information regarding: Gender (Female, Male); Ethnicity (African-American, Asian, Hispanic, Caucasian, or Other); Age (<18, 18-25, 26-35, 36-45, >46); Residence (Manhattan, Bronx, Brooklyn, Queens, New Jersey, Staten Island, other); Sexual Orientation (heterosexual, homosexual, bi-sexual, other); Educational Level (Some high school, High school graduate, Undergraduate Degree, Masters Degree, Above Master Degree PhD, MD, DDS, DO).

Table 2 indicates the number of heterosexual and homosexual males in each of the five age groups (<18, 18-25, 26-35, 36-46,>46). The data in Table 2 indicates that 48% of the subjects from both groups in the 26-35 age range. Ten percent of the heterosexual group listed

themselves in the 36-46 age group compared to 27% from the homosexual group. An opposite effect was seen with only 13% from the homosexual 18-25 age group when compared to 34% from the heterosexual same age group.

A Pearson Chi Square Analysis was conducted, using sexual orientation (Heterosexual vs. Homosexual) x Age and yielded a significant χ^2 (df= 4, n=200)=19.060 $p>.001$, thus a significant difference was found between the Heterosexual and Homosexual males on their total score for age.

Table 2

Heterosexual and Homosexual Males in Each
of the Five Age Groups

(N=200)

Age Group	Heterosexual Males (N=100)	Homosexual Males (N=100)
<18	3	2
18-25	34	13
26-35	48	48
36-46	10	27
>46	5	10

Table 3 indicates the number of heterosexual and homosexual males in each of the five Ethnic groups (African American, Asian, Caucasian, Hispanic, Other). The data in Table 3 indicate that 62% from the heterosexual Caucasian male group and 66% from the homosexual Caucasian male group and therefore were almost equally matched. African American heterosexual males were 7% as compared to African American homosexual males at 10%, Asian heterosexual males were 15% compared to 6% under the homosexual male group, Hispanic heterosexual males were 8% compared to 11% from the homosexual male group.

The ethnic group estimates conducted by the U.S. Census Bureau New York Regional Office for 1997 are still in a developmental stage and may not be accurate. Thus with no reliable data and little information from previous studies, these figures should be used with caution.

Table 3

Heterosexual and Homosexual Males in Each
of the Five Ethnic Groups

(N=200)

Ethnic Group	Heterosexual Males	Homosexual Males
	(N=100)	(N=100)
African American	7	10

Asian	15	6
Caucasian	62	66
Hispanic	8	11
Other	8	7

Table 4 indicates the number of heterosexual and homosexual males in each of the seven residence groups (Manhattan, Bronx, Brooklyn, Queens, New Jersey, Staten Island, Other). Manhattan male homosexuals with 43% were more than twice their Manhattan male heterosexual group at 20%. Brooklyn male heterosexuals and homosexuals were equal with both 16% of the data. Twenty-four percent of male heterosexuals and 8% of homosexuals were from Queens. Whereas 22% of male homosexuals and 7% of heterosexuals were from New Jersey. Nineteen percent of male heterosexuals and 9% homosexuals listed "Other" as their residence. Ten percent of male heterosexuals and 2% of homosexuals listed the Bronx as their residence. Four percent of male heterosexuals were from Staten Island.

Table 4

Heterosexual and Homosexual Males in Each
of the Seven Residence Groups

(N=200)

Residence Group	Heterosexual Males	Homosexual Males
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	(N=100)	(N=100)
Manhattan	20	43
Bronx	10	2
Brooklyn	16	16
Queens	24	8
New Jersey	7	22
Staten Island	4	0
Other	19	9

Table 5 indicates the number of heterosexual and homosexual males in each of the four sexual orientation groups (Heterosexual, Homosexual, Bisexual, Other). No subject checked "Other" for sexual orientation and only eight subjects selected Bisexual. The eight Bisexual DAPs were utilized as training samples to be prejudged by the raters for inter-rater reliability, but eliminated from subsequent data analysis.

Table 5

Heterosexual and Homosexual Males in Each
of the Four Sexual Orientation Groups

(N=208)

Sexual Orientation Group

Heterosexual	100
Homosexual	100
Bisexual	8
Other	0

Table 6 indicates the number of heterosexual and homosexual males in each of the five educational level groups (Some high school, High school graduate, Undergraduate degree, Masters degree, Above master Degree. PhD., MD., DDS., DO). Eighty percent of the heterosexual subjects and 81% of the homosexual subjects had earned an undergraduate degree or higher. Twenty percent of the heterosexual subjects had less than an Undergraduate as did 19% of the homosexual subjects. Overall, 80% of both groups were college graduates. Heterosexual subjects were sampled during the evening when a majority of students attend graduate school. This may account for the high level of undergraduates. According to the U.S. Department of Commerce Bureau of the Census (1998), about 82% of all adults ages 25 and over have completed high school and 24% have completed a Bachelor's degree or more in the United States. In New York City about 69% of all males ages 25 and over have completed high school and about 25% have completed a Bachelor's degree or higher (U.S. Census Bureau

New York Regional, 1990). Thus, this sampling limitation is not representative for an average male population and should be used with caution.

Table 6

Heterosexual and Homosexual Males in Each
of the Five Educational Level Groups

(N=200)

Educational Level Group	Heterosexual Males (N=100)	Homosexual Males (N=100)
Some High School	4	1
High School Graduate	16	18
Undergraduate Degree	43	54
Masters Degree	29	17
Above Master Degree	8	10

Machover Classification Categories

Table 7 presents frequency distribution on the Machover scoring categories for the hip and buttocks area from the drawings of the heterosexual and homosexual male groups. The data indicate that 5 of the 100 heterosexual (5%) and 2 of the 100 homosexual (2%) males were judged by the trained raters to have drawn hip and buttock

indicators. A 2 x 2 Chi Square analyses with the Continuity Correction was performed, using sexual orientation (Heterosexual vs. Homosexual) x Presence or Absence of Hip/Buttocks indicators, and yielded a non-significant $\chi^2(df=200) = .592. p < .442$. Thus, no significant difference was found between the Heterosexual and Homosexual males on their total classification for hip and buttock classifying categories proposed by Machover.

Table 7

Machover Classification for Hip and Buttocks Indicators
Categories by Heterosexual and Homosexual Males

(N=200)

Category	Heterosexual Males (N=100)	Homosexual Males (N=100)
Overdeveloped Hips (front/side view)	2	2
Overdeveloped Buttocks (front/side view)	1	0
A Break in Line at Hips/Buttocks	1	0
Jacket/coat extending beyond the main body part	0	0
Overdrawn area of the hips/buttocks	1	0
Total	5	2

Table 8 presents frequency distributions on heterosexual and homosexual male subjects who, when first asked to "draw a person," drew a female, rather than a male first. Machover (1949) indicated that in addition to the hip and buttocks, the drawing of a female figure first by a male subject, is a diagnostic criteria for male homosexuality. The data indicate that 16 of heterosexual males (16%) and 19 of homosexual males (19%) were judged to have drawn a female first, when requested to "draw a person." A 2 x 2 Chi Square Analysis with the Continuity Correction was conducted, using sexual orientation (Heterosexual vs. Homosexual) x Presence or Absence of First-Drawn Figure Indicator and yielded a non-significant χ^2 (df= 1, n=200)=.139. $p < .710$, thus no significant difference was found between the Heterosexual and Homosexual males on their total classification for the homosexual draw a female first classification category proposed by Machover.

Table 8

Machover Classification for Sex of the First-Drawn Figure,
 (Female)Category by
 Heterosexual and Homosexual Males
 (N=200)

Category	Heterosexual Males	Homosexual Males
	(N=100)	(N=100)

Female gender drawn first	16	19
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Table 9 shows the combination of both the hip/buttocks and first-drawn figure indicators; 21 of heterosexual males (21%) and 21 of homosexual males (21%), an equal number, were found to draw figures diagnostic of male homosexuality using the Machover criteria. Based on these results no significant differences were found between the two sexual orientation categories with regard to the two Machover indicators.

Table 9

Machover Classification for Sex of the First-Drawn Figure
(Female) and Hips/Buttocks Indicators
by Heterosexual and Homosexual Males

(N=200)

Category	Heterosexual Males	Homosexual Males
	(N=100)	(N=100)

Female gender drawn first	16	19
Hips/Buttocks indicators present	5	2
<hr/>		
Total	21	21
<hr/>		

Summary of Results

Based on these analyses, the two research questions posed in Chapter One may be answered as follows. The five Machover (1949) hip and buttock indicators are non-significant in differentiating the drawings by heterosexual males from homosexual males. The H1 is rejected. Thus, it is determined the classification procedure is not accurate enough to be useful as a clinical assessment tool for male homosexuality.

Chapter 5

SUMMARY, DISCUSSION AND CONCLUSIONS

Statement of the Problem

The purpose of this research study was to explore the Machover (1949) interpretation that attention to both the hips and buttocks drawn by male subjects in their first male Draw-A-Person Test (DAP) drawing, and whether the drawing of a female figure first by a male subject are diagnostic criteria for male homosexuality. These rules of interpretation involving the qualitative aspects of the DAP were derived from Machover's clinical experience as well as a variety of rational considerations, most of which reflect a psychoanalytic orientation. Whether these DAP criteria developed by Machover (1949) or Human Figure Drawings (HFDs) interpretations developed by Goodenough (1926) are

accurate enough to be useful as a clinical assessment tool for male homosexuality.

In spite of the relative lack of data and information, many clinical workers over the years have used these psychodynamic interpretations without question (Buck, 1948; DeLeo, 1973; Levy, 1950; Hammer, 1958; Machover, 1949; Wench, 1992). However, Joiner & Schmidt (1998) observed that much of the research on the DAP hypotheses has been poorly conducted. Many psychological examiners use the DAP uncritically and make various sweeping generalizations based on its results. Over the years, the clinical usefulness of the DAP has come into question (Bardos, 1993; Gresham, 1993; Holtzman, 1993; Joiner & Schmidt, 1998).

For the male homosexual, environmental stressors such as social and emotional isolation may often be of critical importance during his psychological assessment process. Unknowingly, the psychologist may fail to address the unique concerns of the male homosexual client. Without the additional information that a personality projective test may contribute, a psychologist may be less informed and less able to attend to his client's concerns. The DAP can contribute to a personality assessment process when the interpretations are reliable (Joiner & Schmidt, 1998).

However, the interpretations for male homosexuality are problematic in the basic research design for the majority of studies conducted and there is a need to explore those interpretations. Without reliable projective tests, a psychologist may be less able to analyze why a male exhibits poor school or work attendance, peer or staff isolation and an inability to focus when in class or at work. These behaviors can in turn produce poor academic or work performance and behavioral problems, which may lead to tragic outcomes (Rotheram-Borus, Rosario, Van-Rossem, Reid & Gillis, 1995).

Utilizing personality tests such as the DAP to interpret possible homosexual indicators from the male client, providing these indicators were accurate, would be a valuable tool for the psychologist. A psychologist would be able to address the needs of his clients more effectively and accurately, if his DAP interpretations have more reliability and validity.

In reviewing the past research, the majority have been conducted in institutional settings such as mental hospitals, disciplinary barracks in the Armed Services, or prisons (Buck, 1949; Geil, 1944; Hammer, 1958; Levy, 1950). For the male subject in these studies, their homosexuality

seemed to be the sole reason for their restrictive setting. Clearly this kind of research selection process is not based on a random sampling of either homosexual or normal populations. Then these previous studies may not be generalizable beyond an institutional homosexual population.

Therefore, it was important to investigate the male homosexual from a non-institutional, DAPs setting. It could be speculated that today's urban male homosexual would be less likely to be subjected to arrest or imprisonment due to their acknowledged sexual orientation, allowing a random sample of a more typical population of homosexual males than those instituted for homosexual offences. The DAPs produced for this study were obtained in New York City. New York City is one of a handful of cities in the United States where male homosexuality is not considered a punishable crime and where male homosexuals have an acknowledged district and culture recognized by their city government (Harris, 1997).

Statement of the Procedures

This research was designed to determine if 100 self-acknowledged male homosexual subjects place more attention on either the hips, buttocks or both, in their first drawn

male DAPs as compared to 100 self-acknowledged male heterosexual subjects. Machover (1949) indicated that the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality, so these results were analysis separately.

The adult male heterosexual population was selected from two New York City college campuses: Hunter College and New York University. The adult male homosexual subjects were sampled at a New York City gay community center and a bookstore specifically targeted to the homosexual population. Each subject was asked to first draw a person and then asked to draw a person of the sex opposite that of the first drawn figure. They were then asked to fill out a questionnaire pertaining to gender, age, race, sexual orientation, education, and the area of New York City where they lived. A food snack was offered as a reward for their service.

In order to determine if the male subjects emphasize both the hips and buttocks in their first drawn DAPs, three psychologists who had met the researcher's criteria classified for these indicators for all Ss without prior knowledge of the subject's sexual orientation. A double blind approach was to lessen selection bias. The three

psychologists, two males and one female, were doctoral level, and had at least eight years of clinical and school experience. The two groups were compared on each of the five hip and buttocks indicators as proposed by Machover (1949) as a classification system for the identification of male homosexuality. The Machover (1949) hip and buttock indicators were used to determine which of the indicators significantly differentiated the drawings of the two groups. An objective classification procedure was developed by this investigator, and the accuracy of this procedure was tested to determine its usefulness as a clinical assessment tool. It was found to have a high reliability on scoring agreement (100%) by the trained raters.

Machover (1949) indicated that the drawing of a female figure first by a male subject is also a diagnostic criteria for male homosexuality, so these results were analyzed separately.

Research Hypotheses Used

The study addressed the following question:

1) Will one-hundred, non-institutionalized, male homosexuals place more attention to either the hips or buttocks or draw a female, in their first Draw-A-Person Test when compared to one-hundred, non-institutionalized, male heterosexuals' Draw-A-Person Test?

Ho: It is hypothesized that there will be no significant difference between the one-hundred, non-institutionalized, male homosexuals' first Draw-A-Person Test and the one-hundred, non-institutionalized, male heterosexuals' first Draw-A-Person Test, in regard to their attention to the hips and buttocks or having drawn a female first.

H1: It is hypothesized that there will be a significant difference between the one-hundred, non-institutionalized, male homosexuals' first Draw-A-Person Test and the one-hundred, non-institutionalized, male heterosexuals' first Draw-A-Person Test, in regard to their attention to the hips and buttocks or having drawn a female first.

Results

The data indicate that 5 of the 100 heterosexual (5%) and 2 of the 100 homosexual (2%) males were judged by the

trained raters doing blind ratings to have drawn hip and buttock indicators. The inter-rater reliability of scoring by the trained raters was 100%. A 2 x 2 Chi Square analysis with the Continuity Correction was performed, using sexual orientation (Heterosexual vs. Homosexual) x Presence or Absence of Hip/Buttocks indicators, and yielded a $X^2 (df=200) = .592. p < .442$. Thus, a non-significant difference was found between the Heterosexual and Homosexual males on their total classification for hip and buttock homosexual categories proposed by Machover (1949).

In addition to the hip and buttocks, Machover (1949) indicated that if a female figure was first drawn by a male subject, it is indicative of male homosexuality. The data indicate that 16 of heterosexual males (16%) and 19 of homosexual males (19%) drew a female first, when requested to draw a person. A 2 x 2 Chi Square Analysis with the Continuity Correction was conducted using sexual orientation (Heterosexual vs. Homosexual) x Presence or Absence of First-Drawn Figure Indicator and yielded a non-significant $X^2 (df= 1, n=200) = .139. p < .710$, thus no significant difference was found between the Heterosexual and Homosexual male groups on their total classification for drawing a female first as proposed by Machover.

In summary, the Machover hip and buttock indicators did not significantly differ from the drawings by college aged heterosexual males from non-institutional homosexual males. Thus, the usefulness of these indicators seems seriously limited as a clinical assessment tool for male homosexuality.

There has been a tendency among clinicians to accept as established fact the Machover (1949) hypothesis (DeLeo, 1973; Hammer, 1958; Levy, 1950; Wench, 1992). This research study indicates that the great majority of urban male homosexuals do not draw overdeveloped hips and buttocks. This is contrary to the wide-spread hypothesis that male homosexuals do draw overdeveloped hips and buttocks (Buck, 1948; DeLeo, 1973; Levy, 1950; Hammer, 1958; Wench, 1992). Why were the results of Machover's tests different and why from the findings of this current study?

The selection process for subjects in past research on male homosexuality indicators in DAPS seems hopelessly problematic (Joiner & Schmidt, 1998). The male homosexual subjects were from prisons, army detention centers and mental wards (Buck, 1948; Geil, 1944; Hammer, 1958; Levy, 1950; Machover, 1949). The 1940's, 1950's and 1960's were

times of oppression and intolerance for the male homosexual. Male homosexuality was regarded as an illness, subject to arrest, imprisonment or treatment cures (Katz, 1983). The DAP studies of male homosexuals from this period seem to indicate their images of their bodies are haunted by a sense of weakness, futility, unattractiveness, and of sexual subordination to the heterosexual male.

Psychological literature from this period postulated male identification with a female role model and/or having a developmental fixation on their own sexual areas (Geil, 1944). Interpretation on the DAP would then reflect these narrow psychological views of the times (Geil, 1944; Machover, 1949; Levy, 1950). Thus, the drawing by a male homosexual subject would be interpreted as female identification or a developmental fixation on those sexual areas (Freud, 1930).

Machovers (1949) believed that the first DAP drawing reflected the subject's wish regarding how they want to be seen by their world. What Machover (1949) does not state is how the culture viewed male homosexuals at the time and how this in turn impacted on the male homosexual's self-esteem. Thus, they may have been products of their time,

persons who were told what they were and how they should behave by their culture (Katz, 1983).

The 1980's and 1990's have witnessed the growth of the gay liberation movement and with it, an emphasis on the male homosexual population to be lean, muscular and masculine (Harris, 1997). For American society in general, there has been a dramatic change for the average male in weight and body shape. According to Cash and Pruzinsky (1990) the past two decades have witnessed the emergence of a psychology of physical appearance that involves the study of how a person's physical attributes and somatic self-perceptions affect his life. The application of this concept to the urban male homosexual appears to be the same (Harris, 1997).

In both American culture and the urban male homosexual sub-culture, the body has come to represent a reflection of the self and as a result, great emphasis is placed on physical appearance (Fallon, 1990). Thus, when requested to draw a person we should also include culture change when restating old interpretations.

Body image is constantly evolving and continuously changed by cultural trends in physical appearance (Cash, 1990).

Within America these cultural changes are primarily

determined by the media and have a tremendous influence on body perception at social, cultural and individual levels. Male images portrayed in mass media are readily taken as the cultural standards for physical appearance (Sharkey, 1993).

Using social comparison theory, Deaux and Wrightsman (1988) state that one's own body image includes his perception of the cultural standard and the extent to which he matches that standard. The male homosexual is no longer the ill, pervert, or "sissy" eunuch of the 40's and 50's, which is when most of the DAP clinical research on male homosexuality was completed (Geil, 1944; Levy, 1950; Machover, 1949). Due to the rise of the gay liberation movement, the male homosexual has acquired enough self-esteem to overthrow his sense of physical inadequacy to the heterosexual male (Harris, 1997; Michelangelo, 1997). As our American culture has changed, so too has the urban male homosexual changed with it, the DAP would naturally reflect this cultural change and Machover's (1949) interpretations then perhaps fail to "change" with the cultural times.

Like other urban minority groups it is now apparent to many researchers that the urban male homosexual also has his own special sub-culture (Harris, 1997; Michelangelo,

1997). It is then necessary to view the male homosexual culture not only against the background of that particular part of the urban subculture he participates in, but also against the background of the larger society (Harris, 1997; Katz, 1983). This was not done by the majority of prior DAP researchers. They did not venture out into the urban world of the 1940's, 50's and 60's. They remained isolated, as were the male homosexual subjects they studied (Geil, 1944; Levy, 1950; Machover, 1949).

The 1980's brought AIDS and with it what has been called "gay gym culture." Muscularity has now progressed and become so synonymous in the minds of most urban people with male homosexuality that an overdeveloped male physique in a tight t-shirt and jeans can almost certainly be a "giveaway" to one's sexual orientation (Harris, 1997). However, according to Allen (1990) heterosexual men in general are now taking on the same unrealistic standards that have been a burden to women and male homosexuals for years. They too are now defining themselves more by their physical appearance. This would only be heightened for the male heterosexual and homosexual in their DAP, in a culture that tells us physical appearance is one of the main inducements for social and emotional interactions (Harris, 1997).

We live in a culture that is focused on physical beauty and where men are often highly insecure about their masculinity. However, this is no longer limited to one's sexuality. Thus to assume that homosexuals would draw overdeveloped hips and buttocks leaving the rest of the body undeveloped would seem to be culturally unlikely. There have been enormous changes over the last fifty years in both psychology and society's tolerance for the male homosexual. Why the interpretations for the DAP have not changed could be attributed in part to a lack of new research (Joiner & Schmidt, 1998).

In summary, it is unfortunate that such assumptions as Machovers' (1949) interpretation of the hips and buttocks have become so widely accepted as an indicator for male homosexuality (Wench, 1992). As a result, most of the related research is defined by the period in which it was conducted. That is, male homosexuality was seen as a symptom of mental disease, as a personality disturbance, as a neurosis, or as a fixated infantile level of psychosexual development (Anderson, 1975; Rubin, 1965). In this respect, the psychodynamic literature is very narrow (Anderson, 1975).

The obvious deficiencies of the prior research studies (Geil, 1944; Hammer, 1958; Levy, 1950; Machover, 1949) and the fact that the work was limited to restricted institutional settings for the male homosexual subjects render all the interpretations questionable. Since the results for the prior DAP studies are based on subjects that could not be considered representative of our present culture, it is hoped that this current research finding could resolve the use of this indicator as accurate.

Recommendations for Further Research

Refinement, validation and correction of DAPs interpretations on male homosexuality would prove to be of assistance to the psychologist when forming an interpretation of male homosexuality. The psychologist would be able to provide a more comprehensive personality assessment. DAPs could enter into the general personality assessment, when accurate interpretations have been conducted; with reliable datum that has been researched with a normally adjusted population, from a non-institutional setting. If there are inaccurate interpretations, they in turn should be challenged.

Traditionally, in a majority of DAPs studies, body image research has focused on the child and adolescent

(Hayslip, Cooper, Dougherty, & Cook, 1997). However, within American culture for the adult, the body and face have come to be a representation of the self and as an outcome, physical appearance has become an important factor (Fallon, 1990). In addition to cultural influences, adult developmental stages have an important effect on body image for the adult throughout their lifetime (Hayslip & Panek, 1993). If we view the interpretations of DAPs based more on a cultural stance coupled with the age of the subject, there are an infinite number of research studies to be conducted that would hopefully contribute to the personally assessment process.

As mentioned previously in today's American culture heterosexual and homosexual males are faced with the media-driven cultural standards for physical appearance (Sharkey, 1993). Given the cultural stereotypes within the heterosexual and homosexual communities, younger, more muscular and hyper masculine males are considered more attractive. Research using DAPs within the middle aged and older homosexual community is needed. For example, does a middle aged or older homosexual male feel less attractive, and less employable? If so, would this appear on their HFDs in their body structure? This could be explored in

future DAPs work, linking body image to quality of life in older adulthood.

This research study of 200 urban males attempted to explore a significant body difference between heterosexual and homosexual DAPs within the hip and buttock area. However, due to the high number of college graduates (80%) within, there maybe a skewed view by an "elite" group of urban educated male subjects. The results may be quite different if done in Americas' Midwest with a more representative average random sampling of heterosexual and homosexual males. In addition, due to the nature of New York City, tolerance and truthfulness may be a more difficult assumption in the Midwest when requesting information such as sexual orientation.

For the male homosexual outside the urban cities, their sexuality is often secretive and their cultural actives subjected mostly to homosexual bars (Harris, 1997). Because they are subject to arrest, police entrapment and bias attacks, it would be significant to find any differences in their DAPs when compared to urban male homosexual's DAPs. Gordon Allports' (1954) work on the nature of prejudice introduced the idea that patterns and behaviors for the male homosexual can be shaped both by the

dynamics of the male homosexual groups and by the viewpoints of the dominant majority toward him as a member of a socially outcast minority.

As a minority group, the male homosexual may develop patterns of behavior or traits due to victimization from society. Here possible research would be able to see any significant differences between the urban male and mid-western male homosexual. Based on McElhaney (1969) finding that hands concealed in pockets in DAPs are indicators of male loafing or delinquent behaviors, would male homosexuals DAPs have a significant number of concealed hands when compared to urban male homosexuals? DiLeo (1973) found that hands in pockets represented compulsive masturbatory behavior. Would male homosexuals in urban society when compared with mid-western male homosexuals have a significant number more or less?

For the majority of the DAPs research on male homosexuality, male subjects have been from prisons, hospitals, clinics, or from the private offices of researching psychologists. This researcher questions the reliability of these prior studies when generalized to the male homosexual population at present. How would the male subject's personality be reflected on their DAPs free from

the confines of an institutional treatment setting? Within this research, the male subject was volunteering his services unaware of his sexual orientation as a prevalent factor. It was this attempt at a more random sample of the overt male homosexual that in turn may have produced a more reliable study of the hip and buttocks in the DAP as indicators for the male homosexual. It is assumed that by attempting to confirm these indicators, the reliability for the DAP interpretation will be strengthened.

Taking a projective approach to any assessment, the use of DAPs should be based on reliable research information. The developmental change that should be explored, the impact of age, and the cultural change and the relationship issues on body image are all studies that could further enhance the DAPs validity.

Implications

The major implication for clinical practice is that the DAP method should not be used as the means of determining whether a male is of homosexual orientation based upon interpretation of the hip and buttocks. DAPs maybe in many cases a worthwhile tool in the hands of a well-trained, competent clinician when used with a number of other personality tests (Joiner & Schmidt, 1998).

However, the clinical utility of drawings has long been a topic of ongoing controversy regarding their validity and reliability (Joiner & Schmidt, 1998; Motta, Little, & Tobin, 1993). Although DAPs have been used for decades for both diagnostic and treatment purposes, the current research base regarding the usefulness of these drawings with male homosexuality is not supportive of its use in identification of homosexuality in males.

It is suggested that DAPs should be combined with other types of assessment instruments and styles of clinical interviews to see if better predictions of male homosexuality can be made with numerous measures conjointly. Rating scales, such as the Louisville Behavior Checklist, and a number of other projective tests, such as the Thematic Apperception Test (TAT), have been combined with DAPs to increase personality predictability (Chantler, Pelco, & Meritn, 1993).

However, an important finding was the high (100%) inter-rater reliability among the coders trained to use the Machover (1949) hip and buttock indicators. This is noteworthy in that it suggests that psychologists and other clinicians can be adequately trained to identify which graphic indicators may be present in the human figure

drawings. Although specific training in art therapy may enhance the process, it makes no difference in the outcome of the overall results of the identification of specific graphic indicators (Cohen & Phelps, 1985).

It is important for universities to train their developing psychologist on how to use DAPs as part of a psychological personality assessment. It should be emphasized that the drawings or any other individual component of the evaluation process should not be used alone to make a determination of male homosexuality. In addition, on going training at graduate and post-graduate levels is needed in order to teach present and future psychologists more about human sexuality, including homosexuality. If their education is more complete, clinicians maybe come more sensitive and may have more interviewing success. The need for graduate level education and training in general human sexuality, and the ongoing training of all professionals on human sexuality is emphasized in the literature (Fontaine & Hammond, 1996).

The role of the school psychologists is particularly important in that they are more likely to encounter students seeking sexual information. The school psychologist should also be available to consult with

teachers and administrators who interact with students and who need help in planning appropriate educational curricula on the subject of human sexuality, birth control and homosexuality. In conclusion, at present we cannot differentiate between male homosexuals DAPs and male heterosexuals DAPs based on the hips and buttocks or having drawn a female first.

Conclusion

This study indicates that the Machover (1949) Draw-A-Person Test or Human Figure Drawings (Goodenough, 1928) may not be a clinically valuable projective technique in the study of male homosexuality. The evidence that is now available from this study indicates that the great majority of male homosexuals do not draw overdeveloped hips or buttocks or a female first. Analysis of the detailed characteristics of the hips and buttocks and drawing a female first was researched and explored as a source for a predictable data relative to identification for male homosexuality. However, based on this study, there is no convincing evidence. The researcher believes that the Machover DAP technique with regards to the hip and buttocks or having drawn a female first is a method not suited for the study of personality traits of the male homosexual.

This exploratory study of the hip and buttocks drawing characteristics of male homosexuals may indicate that many of the DAPs indicative of male homosexuality referred to in the psychological literature are not characteristic for the male homosexual in the present culture. The Machover (1949) hip and buttock and the drawing a female first, as homosexual indicators, were developed in a psychological and cultural period that has changed significantly. As an objective classification procedure its accuracy and usefulness in this area as a clinical personality assessment tool is considered unlikely and outdated at best.

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APPENDIX A

ADULT CONSENT PARTICIPATION FORM

We would like you to participate in a research study on males and females. The purpose of this study is to gain a better understanding of males and females and their perception of the human form in human figure drawings. If you decide to participate in this study, your involvement will take no more than 10 minutes. We will ask you to draw and check off an identification list. There are no foreseeable risks and for your participation you will receive a food snack.

Your participation is completely voluntary and you are free to refuse or stop at any time. All information will be number coded and thus completely confidential. Your identity will not be revealed nor ascertainable.

Do you have any questions?

All questions during or after this study should be directed to the researcher:

Joel "Buzz" Von Ornsteiner

Doctoral Intern

Y.A.I.

460 West 34th Street, 11 floor
New York City, New York 10001

Please read the following paragraph and if you agree to participate, please sign below.

I understand that any information about me obtained from this research will be kept strictly confidential.

Signature _____

Date _____

Investigator _____

Date _____

Please place your initials here acknowledging receipt of a copy of this consent form _____

APPENDIX B

RATING MANUAL AND RATING SHEET FOR HIP AND BUTTOCK INDICATORS

Introduction:

The rating manual describes the necessary criteria for rating the hip and buttock indicators. Drawn examples are given and illustrate the hip and buttock variables. This rating manual is to be used in conjunction with a rating sheet when judging each drawing. The rater will check the appropriate indicator when they are present, as applicable on the rating sheet.

General: Look at the drawing as a whole study. Ask yourself as a judge, do the hip or the buttock or both stand out? Are they emphasized in the human figure drawing, are they unusual? If you find yourself debating or questioning whether you should rate the hip or the buttock as an indicator or not - then don't! The hip and buttock indicators, if they are present, should stand out. Based on your rating manual and Machover training, the hip and buttock indicators should be prominent when viewed overall within the human figure drawing.

SUBJECT CODE NUMBER A _____

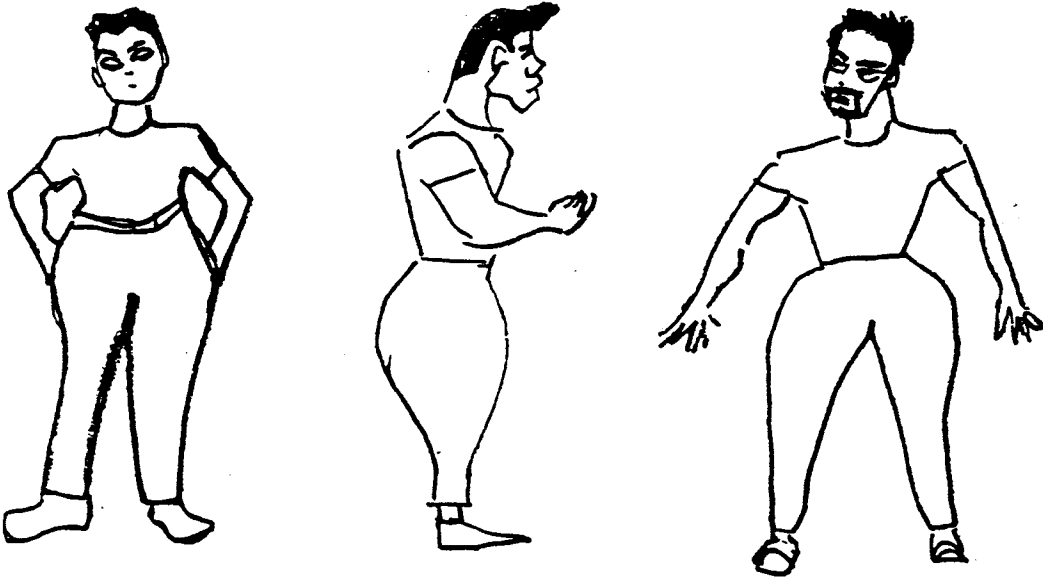
- _____ Overdeveloped Hips (front/side view)
- _____ Overdeveloped Buttocks (front/side view)
- _____ A Break in Lines at the Hips/Buttocks
- _____ Jacket/coat extending beyond the main body part
- _____ Overdrawn area at the hips/buttocks

APPENDIX C

RATING CRITERIA:

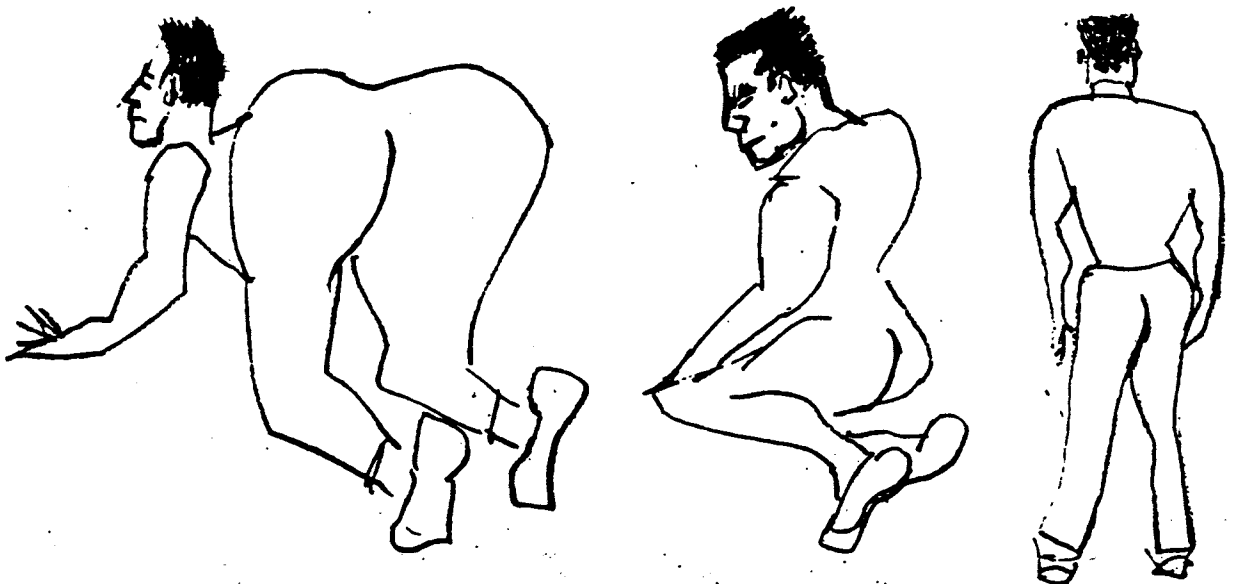
Overdeveloped Hips (front/side view)

General guidelines for rating overdeveloped hips whether front or in a side view: Male figures are drawn in a manner that accentuates the hips of the figure. The hips are over-emphasized.



Overdeveloped Buttocks (front/side view)

General guidelines for rating overdeveloped buttocks whether front or in a side view: Male figures are drawn in a manner that accentuates the buttocks of the figure. The buttocks are over-emphasized.



A Break in Lines at the Hips/Buttocks

General guidelines for rating hips/buttocks whether front or in a side view: Male figures are drawn in a manner that accentuates the hips/buttocks of the figure. The hips/buttocks are over-emphasized with a break or breaks in the lines drawn in the area of the hips and buttocks, not in the overall drawing, but within the area of the hips/buttock.



Jacket/coat extending beyond the main body part



Overdrawn area at the hips/buttocks

General guidelines for rating overdrawn hips/buttocks whether front or in a side view: Male figures are drawn in a manner that accentuates the hips/buttocks of the figure by overdrawing the area. The hips/buttocks are over-emphasized.

