PREDISPOSING FACTORS IN PEDOPHILIA

by

Susan Gordon
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Advisory Committee:

Associate Professor Arnold Spokane, Chairman/Advisor
Professor Charles Gelso
Professor Robert Lissitz
Associate Professor Norman Epstein
Associate Professor Mary Ann Hoffman

ABSTRACT

Title of Dissertation: PREDISPOSING FACTORS IN PEDOPHILIA

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Associate Professor,
University of Maryland

This was an exploratory study about the etiology of pedophilia which examined the biological, psychological, and social background variables that may predispose men to a paraphilic sexual orientation. The biological variables included were chromosomal and hormonal irregularities. The psychological variables were introversion, depression, moralistic attitudes, and aggression (MMPI scales). The social background variables were childhood losses, relationship with parents, childhood sexual victimization, familial pedophilia, incest, and violence.

Data on these variables were collected from a

retrospective chart review of former male patients at Johns Hopkins Sexual Disorders Clinic. The patients represented six different paraphilic (sexually deviant) diagnostic categories: (a) Homosexual pedophiles (b) Heterosexual pedophiles (c) Bisexual pedophiles (d) Exhibitionists (e) Sexual sadists (f) Atypical paraphiliacs.

Results of a stepwise discriminant analysis indicated that there were significant demographic, biological, and social differences among these six paraphilic groups. There were also significant differences between the major groupings of pedophiles (homosexual, heterosexual and bisexual pedophiles) and non-pedophiles (exhibitionists, sadists and the atypical group). Demographically, the diagnostic groups differed with respect to age, birth order, marital status, number of children, occupation and education. Biologically, the paraphilic groups had different testosterone levels. Psychologically, the paraphilic groups did not differ. Because only 14 of the 211 subjects had been given the MMPI, however, results of the analysis of psychological variables must be interpreted cautiously. Socially, the paraphilic groups' differences included experience of childhood loss, age of first sexual involvement, use of violence,

and incestuous involvement.

Two path analyses were conducted to test models of correlational relationships among the variables. The path analyses were conducted first with, and second without, the MMPI scores. Results indicated that two path coefficients were significant: (a) social circumstances, and particularly having a pedophile relative, was related to childhood sexual involvement with an adult, $F(4,118)=6.54$, $p<.001$; (b) incestuous involvement with a child was related to sexual orientation, $F(1,203) = 11.19$, $p<.001$.

It is concluded that although generalizations about pedophiles as a single group cannot be made, a biological predisposition (hormonal irregularities) may interact with childhood familial relationships (father-son) in the development of paraphilias.

This study's limitations, suggestions for future research, theoretical and practical implications are presented.

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Chapter I

INTRODUCTION

Pedophilia literally means "filial love for children" even though most mental health professionals use the term pedophilia to refer to sexual love ("eros" vs "philia") for children. Sexual desire for children does not always lead to sexual contact. Although the term pedophilia is now used interchangably with the terms child molestation and child sexual abuse, a child molester is by definition a pedophiliac, whereas a pedophiliac is not necessarily a child molester.

The Diagnostic and Statistical Manual of Mental Disorders, DSMIII-R, lists the following criteria, all of which must be present, for a diagnosis of Pedophilia:

1. Over a period of at least six months, recurrent intense sexual urges and sexually arousing fantasies involving sexual activity with a prepubescent child or children (generally age 13 or younger).

2. The person has acted on these urges, or is markedly distressed by them.

3. The person is at least 16 years old and at least 5 years older than the child or children in 1.

The age at onset, according to DSM III, is anytime in adulthood, but usually during adolescence. Further,

the course of pedophilia is unknown although homosexual pedophilia tends to be chronic, fluctuating with psychosocial stress.

Problems in Research on Pedophilia

In general, the literature on the treatment of pedophilia is poorly developed. There are few studies comparing different treatment techniques and comparative studies involving follow-up data are almost non-existent. The major treatment approaches that have been tried with this population are group and individual psychotherapy, biological interventions (voluntary castration, medication to reduce testosterone levels) and behavior modification, primarily aversion therapy. The results of these treatment studies have been inconclusive and are limited by methodological shortcomings. Some of these methodological shortcomings include small samples, omission of follow-ups and of control groups, no investigation of subject type-treatment method interaction and use of inmate populations.

A second problem with the literature in this area is bias toward a disease model of pedophilia. Davison and Wilson (1974) point out that the assumption of heterosexuality as a biological-psychological norm and homosexuality as a pathological deviation from this

norm underlies much of the literature. Davison & Wilson note that "normal" and "abnormal" labels reflect the prevailing value judgments of society. The recent deletion of homosexuality from DSMIII illustrates that the psychiatric nosology is an example of how such prevailing value judgements can change. Ungaretti (1978) describes the classical Greek culture, in which pedophilia was a norm, as an illustration of the time specific, culture-specific nature of psychiatric nosology.

Theories of Pedophilia

A few psychological theories address the origin and motivation of the sexual desire for children, or discuss "deviant" (non-heterosexual) sexuality. Perhaps the most serious difficulty with the pedophilia literature is that most studies are not based in theory. Treatments are prescribed and described but there is little investigation of the etiology of pedophilia.

Bandura's concept of deviant models, biological vulnerabilities, separation-individuation, psychoanalytic concepts of arrested psychosexual development and behavioral explanations of learned behavior are among the psychological theories which address pedophilia. There is, however, little or no

empirical evidence supporting these explanations of the paraphilias.

The Social Psychology of Pedophilia. Bandura's Social Learning Theory describes learning which occurs in part through observation and modeling. Social Learning theory may provide some indirect clues for further exploration of the findings that pedophilia is familial (Gaffney, Lurie & Berlin, 1984). There is no direct literature on how psychosocial cues could influence the familial transmission of pedophilia. Gaffney, Lurie & Berlin (1984), however, found that 18.5% of persons with paraphilia had other family members, mostly male, with paraphilias while only 3% of a depressive control group had familial incidence of paraphilia. Further, family members of pedophiles in Gaffney et al. (1984) exhibited pedophilia, and family members of nonpedophiliacs, a nonpedophiliac paraphilia. The results of this study suggest that pedophilia is familial and that further research is needed to delineate the manner of transmission.

Biological Models of Pedophilia. A second avenue of exploration for the familial transmission of pedophilia is genetics. Specific modes of transmission, positive linkage studies or positive association studies are needed to explore the potential

that genetic factors are involved. There is some evidence that a homosexual orientation has a biological base (Kallman, 1952) but only tentative evidence that other sexual predilections are inherited (Gosselin & Wilson, 1980). Some literature suggests that pedophiles are submissive (Peters, 1976; Wilson & Cox, 1983; Freund, 1982; Quinsey, 1977), and have difficulty establishing "normal" sexuality. Wilson & Cox (1983) indicate that hormonal or other characteristics which form the constitutional basis of dominance and submissiveness may be hereditary.

Hormonal factors may also influence sexual behavior. There is a complex interaction between the hypothalamus, pituitary gland, and the testes. Testosterone is produced by cells in the testes and is controlled by a releaser of luteinising hormone (LHRH) which is produced by the hypothalamus and stimulates the release of luteinising hormone (LH) by the pituitary gland. Sperm production by the testes may also be controlled by follicle stimulating hormone (FSH) production in the pituitary gland and by "inhibin", another hormone produced by the testes which inhibits FSH production. LH, FSH, and testosterone, therefore, are hormones that are a part of the endocrine regulatory system. Disturbances of this

regulatory system may be associated with unusual sexual interests or with difficulties in sexual behavior control (Berlin & Schaerf, 1985) but unusual sexual interest or difficulties in sexual behavior control do not necessarily indicate disturbances of the regulatory system. Biological assessments of small samples of pedophiles suggest the presence of endocrinological abnormalities in seven pedophile patients when compared with five non-pedophile patients and five normal control males (Gaffney & Berlin, 1984). Chromosomal anomalies were also found in a number of 18 homosexual pedophiles studied at Johns Hopkins Hospital (Berlin & Schaerf, 1985).

Another important factor that may affect the pedophile population's ability to establish "normal" sexuality is that a high proportion of pedophiles are impotent (Snyder, 1980). Impotence may arise as a result of specific organic abnormalities, such as diabetes, atherosclerosis, abnormal levels of secretion of thryroid hormone, alcoholic cirrhosis or other liver disorders or reduced secretion of androgens (Snyder, 1980). Drugs which block the action of parasympathetic nerves, such as antihistamines or alcohol or those used to treat stomach ulcers, spastic colons, gastrointestional distress, depression and high blood

pressure precipitate impotence in some individuals (Snyder, 1980). Recent evidence suggests that as many as 50% of the cases of male impotence have an organic basis (Lloyd & Schumacher, 1977).

Separation-Individuation Theories. Some psychoanalytic theories focus on infant stages of separation-individuation. Proponents of these theories believe that sexual deviations arise when anxiety disrupts the stage during which a child separates himself from his mother and forms a distinct male identity. The disruptive anxiety may be from an overprotective mother or a father who is distant or abusive. The child may attempt to merge with the mother to avoid abandonment. A fixation at this stage may lead to regression in adulthood. For example, transsexuals, according to this theory, have given up the effort to form a male identity. Transvestites use female clothes to merge with mother. Festishists, according to this theory, use their fetishes as transitional objects to relieve anxiety derived from the period of separation (Grinspoon, 1986).

Psychoanalytic Theories of Pedophilia. Some psychoanalytic theorists have tried to link paraphilic symptoms with the stages of a child's development and the nature of his upbringing. These theorists believe

that sexual deviations (paraphilias) are indirect ways to achieve arousal and release in the face of unconscious forces that prevent ordinary sexual activity.

Freud believed that an individual's character type emerges in childhood from the nature of parent-child interaction (Schultz, 1976; Miller, 1983; Kaplan & Sadock, 1985). An assumption of this viewpoint is that the adult personality is shaped and solidly crystallized by the fifth year of life. Adult neuroses, therefore, are formed in the early years of life. Freud also formulated a theory of psychosexual development, in which the child passes through a series of stages, each defined by psychosexual conflicts that must be satisfactorily resolved before the child can progress to the next stage. Unsatisfactory resolution of a developmental stage conflict results in fixation at that stage.

Paraphiliacs (individuals who have a deviation in objects to which they are attracted) are basically the same as neurotics, except in the point and age of fixation. Paraphiliacs may present fixation at pregenital or Oedipal levels of psychosexual development (Karpman, 1962). The paraphiliac neurosis does not differ from other psychogenic reactions except

that somewhere in its development, through a combination of specific situations, the neurotic conflict found a specific outlet with children.

Psychoanalytic explanations of paraphilias leave much unexplained. It isn't clear, for example, which family circumstances or early turns in emotional development lead to a given type of fixation, separation or oedipal crisis, and regression.

Some psychoanalytic theorists claim that psychiatric symptoms depend on the ego's synthesizing and integrating strength. Some of these theorists view the paraphilias as intermediate in severity between personality and neurotic disorders. Personality disorders are common in severe paraphilias, and borderline personality, like paraphilias, often involve impulsive behavior and confusion about gender and sexual identity (Grinspoon, 1986).

Paraphilias arise when childish forms of libido (instinctual sexual energy) dominate adult sexual life. In early childhood people develop unconscious libidinal fixations in which some part of their instinctual energy remains attached to early partial sexual objects. Classical Freudian theory maintains that although everyone has some fixated libido, adult psychiatric symptoms result when there has been an

imperfect compromise-resolution of a childhood conflict among impulses or between impulses and reality. The most important conflict for a boy arises at the phallic stage, during the oedipal period (about age five) when he unconsciously feels that he is in competition with his father for his mother's love. He unconsciously fears his father's retaliation. To defend against this threat of retaliation, or castration, a boy or man may regress to an early form of gratification in which libido is already invested. The effects of this regression are dormant until adolescence or adulthood, when they emerge in the form of sexual deviations or variations. Fetishists, for example, may reduce castration anxiety by redirecting impulses toward an inanimate object associated with women. Transvestites reduce castration anxiety by becoming in fantasy a woman with a penis while transsexuals convince themselves that they are completely female. They renounce their masculinity. Sadists, according to psychoanalytic theory, triumph over their castration anxiety by converting it to rage and reassert their bodily integrity by dominating victims who represent parents who have aroused dangerous sexual feelings. Masochists unconsciously seek degredation to preempt punishment for forbidden sexual desires.

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Exhibitionists attempt to reassure themselves of their masculinity in an attempt to deny castration. Pedophiles, according to psychoanalytic theory, are trying to compensate for a sense of powerlessness by controlling a form of sexual activity that is emotionally safer and less demanding than adult sexual relationships. It is also believed that the child's immaturity may represent the pedophile himself as the object of a narcissistic fixation (Grinspoon, 1986).

The Oedipus complex in which the mother becomes a love object for the boy and the father is viewed as a rival, arises from the basic conflict of the phallic stage. The Oedipus complex and its resolution through identification with the father, therefore, are critical determinants of adult relations and attitudes toward mature heterosexual relationships (Schultz, 1976).

The Father Model. Given psychoanalytic conceptualization of adult sexual orientation, a male child's relationship with his parents is a decisive factor in his adult sexual preference. The absence or presence of an appropriate father model is particularly important in the resolution phase of Oedipal conflicts. Two clinical observations provide some support for this theory. Adult homosexual males reported more frequently than heterosexual males that: (a) their

fathers had been absent in their childhood, or (b) their childhood relationships with their fathers had been unsatisfactory (Freund, 1983).

Other studies which have compared the relative frequency of father-absence by heterosexual vs. homosexual samples have reported conflicting outcomes (Freund, Langevin, Zajac, Steiner & Zajac, 1974; Freund & Pinkava, 1961; O'Connor, 1964; Terman & Miles, 1936; West, 1959). None of these studies, however, employed adequate sampling techniques or controlled extraneous sources of variation, such as sociological variables which might be related to family breakdown. The methodological shortcomings of these studies might explain the lack of agreement in their findings.

Various partially controlled studies comparing homosexual and heterosexual retrospective self-reports of parental relationships suggest that homosexuals report poor childhood relationships with their fathers (Bieber, Dain, Dince, Brellich, Grand, Gundlach, Kremer, Rifkin, Wilbur & Bieber, 1962; Bieber & Bieber, 1979; Jonas, 1944; Nash & Hayes, 1965; O'Connor, 1964; West, 1959). Controlled studies have yielded similar results (Bell, Weinberg & Hammersmith, 1981; Bene, 1965; Freund & Pinkava, 1961; Siegelman, 1974, 1981). These homosexual and heterosexual samples, however,

were drawn from a psychiatric population. It is possible that these differences in retrospective self-reports of father-son relationships between homosexual and heterosexual males would disappear with a more normal population.

Childhood Sex Victims. Problems resulting from actual childhood sexual experiences, which Freud and many of his followers have attributed to Oedipal fantasies (Peters, 1970), may not be manifested during early life, according to a variation of psychoanalytic theory, but may surface when the demands of adult sexuality overwhelm the individual. Proponents of the actual sexual experience alternative to Freud's theory maintain that the adult with this background would evidence strong narcissism, needing continual recognition and appreciation. In the absence of such support, individuals who had sexual experiences in childhood feel inadequate and inferior and seek relationships in which they can overwhelm and conquer others (Schultz, 1976).

Behavioral Theories. Behavioral explanations of pedophilia assume that pedophilia is a learned behavior which should be addressed through a sexual reorientation process. The assumption is that people can acquire any paraphilia through conditioning, a

process in which an object is at first accidentally associated with sexual release and then becomes necessary for it. The need for this object may become generalized from sexual tension relief to all situations involving tension or anxiety. Behaviorists, however, cannot explain why only some people are conditioned in this manner. In one study, for example, slides of women's boots were alternated with slides showing provocative nude women. Male subjects, in seeming analogy to fetishism, became aroused at the sight of the boots. When the slides of the women were removed, however, the effect faded. In a similar study, using objects other than boots, the men did not respond at all (Grinspoon, 1986). In spite of these limitations, behavioral theories underly many of the interventions used with paraphiliacs (Kelly, 1982).

Statement of the Problem

Theories of "deviant sexuality" are generally not empirically based, and many of the empirical studies which do exist are not based upon the few theories that are currently available. The purpose of the present study was to explore and provide descriptive data about the etiology of pedophilia.

Human beings seek out partners with whom to share companionship, affection, tenderness and intimacy.

Most young people devote a great deal of energy, time and thought toward this end. The majority of adults seek a peer as the object of affection. The man who, for unknown reasons, directs his attention to a child rather than to an adult partner may have a very unique set of personality traits, constitutional factors and life experiences which play a role in the development of his sexual orientation and affectional interests. This investigation of what may predispose a man to a pedophiliac sexual orientation was exploratory, and investigated specific psychological, social, and biological variables, suggested by theory, research, and hunches of expert clinicians in the field.

Hypotheses

Hypothesis 1: Pedophiles will have a significantly higher incidence of familial pedophilia than will other paraphiliacs.

Hypothesis 2: Pedophiles will have a significantly higher incidence of father absence and/or emotional distance during childhood than will other paraphiliacs.

Hypothesis 3: Pedophiles will have a significantly higher incidence of mother absence and/or emotional distance during childhood than will other paraphiliacs.

Hypothesis 4: Pedophiles will have a significantly higher incidence of losses during childhood than will

other paraphiliacs.

Hypothesis 5: Pedophiles will have a significantly higher incidence of childhood sexual victimization than will other paraphiliacs.

Hypothesis 6: Pedophiles will have a significantly higher incidence of incestuous involvement with their children than will other paraphiliacs.

Hypothesis 7: Pedophiles will have a significantly lower incidence of use of violence than will other paraphiliacs.

Hypothesis 8: Pedophiles will have a significantly higher incidence of chromosomal anomolies than will other paraphiliacs.

Hypothesis 9: Pedophiles will have a significantly higher incidence of hormonal irregularities than will other paraphiliacs.

Hypothesis 10: Pedophiles will have significantly higher scores on the Social introversion, Psychopathic deviate, Dominance, Depression and Psyasthenia scales of the MMPI than will other paraphiliacs.

Hypothesis 11: A pattern of correlations among the above stated variables should result in the relationships described in Path Model I (Figure 2).

Hypothesis 12: A pattern of correlations among the above stated variables should result in the

relationships described in Path Model II (Figure 3).

Chapter II

LITERATURE REVIEW

The literature on pedophilia can be divided into five areas: (a) prevelance and epidemiology research (b) demographic descriptions of pedophiles (c) studies of biological factors in pedophilia (d) studies of psychological factors in pedophilia (e) studies of social background factors in pedophilia.

Prevelance and Epidemiology

A review of the main studies on sexual contact with children (Freund, Heasman & Roper, 1982) suggests that most of the studies were primarily limited to data gathered for other purposes (e.g. a search of police files accumulated during a specific period). Remaining studies used small samples and had very limited budgets, not allowing for satisfactory procedures. Additionally, epidemiological and demographic studies have been vulnerable to sample bias. The proportion of unreported cases is unknown. For these reasons, generalizations can only be tentative.

The prevelance of pedophilia in the population is unknown. A review of the Minneapolis Police Department records from 1964-1973 indicated that there were 2400 cases of "sexual abuse" (Jaffe, Dynneson & Ansel, 1975)

during this period. These data, however, included offences such as indecent exposure. A comparison of American and European statistics indicate that sexual activities where children are involved are reported nearly twice as frequently in Europe as in America. Jaffe et al. attributed this discrepancy to different cultural attitudes.

Green (1979) reported that in the District of Columbia, 1000 children per year are involved in sexual activities with adults. Hayman and Lanza (1971) reported that 13% of the children were nine years old or younger and that 23% were 10-14 years old.

Retrospective studies of childhood sexual experiences have also been conducted. These data suggest that 5-28% of those adults interviewed had been approached physically by an adult before reaching age 13. It was estimated that only 6% of these cases had been reported to authorities (Kinney, Pomeroy, Martin & Gebhard, 1953; Gagnon, 1965; Summit & Kryson, 1978).

There is no reliable documentation of pedophilia in females (Freund, 1982; Snyder, 1980). This is about all that is known about the prevelance of sexual activity with children.

In summary, the prevelance of pedophilia in the population is unknown. The statistics that have been

gathered do not reflect unreported cases, are based upon small and unrepresentative samples and are generated from data gathered for other purposes (Freund et al.). Additionally, these statistics reflect cultural biases and include non-pedophiliac data (Jaffe et al.).

Demographic Descriptions of Pedophiles

In a study of fifty pedophiles from the Central Administration Committee for Pedophilia, an international organization aimed at pedophile social integration, pedophiles responded to a demographic questionnaire inquiring about such variables as age, family status, education, occupation satisfaction, and first sexual experience (Bernhard, 1975). The questionnaire results indicated that subjects were often youngest children, not married, had high school or college degrees, were not satisfied in their occupations, became aware of and had their first pedophile contact during adolescence, were open toward their parents, preferred boys between 12-14 years of age, had been sentenced and received psychiatric treatment, and finally, did not want to get rid of their pedophilia.

This study's primary shortcoming was sampling bias. The organizations' membership represented an

organized political pressure group trying to influence public opinion. Peripheral membership in the group may have been seeking protection against loneliness. Other motives for membership may have been court action - former convicts felt that their identity was known anyway.

As with the Wilson & Cox study (1983) Bernhard's use of an at-large sample provided data about pedophiles that is rarely available to researchers using institutionalized samples. Data collected on subjects who are hospitalized or incarcerated may not be as valid as the information obtained in Bernhard's study.

Alfred Danna (1984), a detective with the Sex Offense Unit of the Baltimore City Police Department described 44 adult males arrested between October, 1981 and August, 1982 for soliciting young male prostitutes. According to Danna, these pedophiles had the following characteristics: (a) related to children better than to adults; (b) portrayed child/teen as the sexual aggressor; (c) often middle-aged; (d) usually non-violent; (e) usually single but some were married; (f) associated with other pedophiles; (g) often sexually abused as child, (h) compulsive collectors and record-keeper; (i) gave child presents and money and

acted as child's friend; (j) were mostly professional men. These pedophiles' occupations included program technician, laborer, micro-biologist, store manager, computer operator, real estate, Federal government employees, bus driver, restaurant owner, priest, home improvements, gay night club manager, jail guard, truck driver, seamen, food clerk, nurse, accountant, musician, financial consultant, florist, dispatcher, painter, restaurant manager, psychiatrist, clerk, usher, teacher, car dealer and driver. Their ages ranged from 18 to 61. Two were black and 42 were white. Although Danna did not explain how variables were measured or attempt any experimental manipulation, his descriptions suggest that pedophiles are represented in a wide range of occupations.

Biological Studies

In the past, most theories have hypothesized that sexual orientation differences are influenced by early life experiences. The way in which biological factors, measurable in a lab, contribute to human sexual experience and behavior is unclear. There has been some evidence that a female fetus, exposed to high doses of androgen, may show, as an adult, patterns of typically male psychosexual development (Money, 1980). There are also data suggesting that there may be a

genetic predisposition towards male homosexuality (Pillard, 1981). In animals, biological factors, such as estrus, greatly influence sex-related activities. The research reviewed in this section represents the efforts that have been made to learn more about organic factors that may be associated with unusual sexual orientations and about the biological "risk factors" that may predispose people towards paraphilic behavior.

Gaffney and Berlin (1984) found an endocrinological abnormality in pedophiles. Seven pedophile patients, five non-pedophilic patients and five normal male controls were matched for age, height, weight, testosterone, baseline luteinising hormone (LH), follicle stimulating hormone (FSH) and FSH responses to synthetic luteinising hormone-releasing hormone (LHRH). There was a significant difference between the pedophile group and the other two groups in the LH response to an infusion of 100 mcg. of LHRH. The pedophiles responded with a marked elevation of LH, indicating a hypothalamic-pituitary-gonadal dysfunction. Unusual sexual interests or difficulties in sexual behavior control may be associated with disturbances of this regulatory system (Berlin & Schaerf, 1985).

The researchers point out that their sample was

biased. It was a small (n=17), selected sub-population. Also, the groups had different gender preferences in sexual activities. Although these results are preliminary until replicated, the authors claim that it does suggest that there may be an association between hormonal imbalance and pathological behavior.

In a second study, Berlin and Schaerf (1985) performed the following laboratory tests on a group of 41 men with diagnosed paraphilias (Erotic Sadism, Pedophilia, Hypersexuality, Exhibitionism, Voyeurism, Transexualism): EEG; CT Scan; levels of testosterone, estrogens, progesterone, follicle-stimulating hormone (FSH), luteinising hormone (LH); and chromosomal karotyping and analysis. 34 of the 41 men had one or more significant biological or clinical abnormalities, including structural brain damage, hormonal irregularities and chromosomal anomalies such as Klinefelter's Syndrome (a person with an XXY karyotype who is born with small, infertile genitals). A number of the 18 homosexual pedophiles in the study had Klinefelter's syndrome and the researchers said that it was unclear whether these patients should be thought of as men with an extra x chromosome or as women with an extra y chromosome.

The researchers pointed out that these laboratory tests were not performed on a group of males with conventional sexual interests. While the biological abnormalilties found in the paraphilic group occurred more frequently than would be expected by chance, the lack of a control group in this study limited generalizations that can be made from this study about biological pathologies and sexual orientation.

In spite of these limitations, this study represents one of the few attempts that have been made to investigate a possible link between biological and sexual behavior.

Psychological Studies

Wilson and Cox (1983) compared the results of a lifestyle questionnaire and the Eysenck Personality Questionnaire (EPQ) completed by 77 members of the Paedophile Information Exchange (PIE), a self-help club for men who are attracted to children, with age-matched control males. The pedophiles were significantly higher than the control males on the Introversion, Psychoticism and Neuroticism scales. Individual item analysis revealed that PIE members were more likely to be sensitive, shy, lonely, depressed and humorless but weren't troubled by obsessions, guilt or concern about their looks. Wilson and Cox (1983) also found

individual variation within the sample: those subjects who were high on Psychoticism and low on Extroversion were more attracted to younger children and were less able to contemplate sex with adults; those subjects who were high on Neuroticism were more likely to have sought treatment as they were less happy about their sexual preference.

The results of this study, however, must be interpreted cautiously. There was sampling bias. The subjects were not a random sample, only 1/2 of the club's membership responded and in-depth interviews were conducted with only 10 of the subjects. Further, the finding that PIE members were over-represented in professional occupations may only mean that more literate pedophiles were likely to hear about and take an academic interest in PIE. Another shortcoming was the use of 404 males aged 30-40, from the EPQ manual, as the control group. The difference between the PIE group and the control groups on psychoticism scores was equivalent to only one item in the test. The significantly higher Psychoticism score among the pedophile group, therefore, did not justify the conclusion that PIE members are pathological as a group. The standard deviation for the Psychoticism score and the skewed distribution suggests that a few

of the PIE subjects showed clinical levels of psychoticism. The significant Introversion scores must also be interpreted with caution. It is not clear whether pedophiles gravitate toward children because of their introversion or whether their social withdrawal is a result of the isolation engendered by their sexual preference.

The methodological limitations in Wilson & Cox's research, however, were offset by the advantages of using an at-large sample. The institutionalization effect on subjects, which threatens the internal validity of most studies with this population, was not present in the Wilson & Cox research.

Freund (1982) briefly reviewed the findings of studies on pedophiliac's personality, age, recidivism, violence and family background. These findings can be summarized as follows: (a) pedophiles have distant fathers (Mohr, 1982); (b) poor relationships with both parents (Gebhard & Gagnon, 1964) and (c) feel inadequate, passive, dependent, low in achievement orientation, unorganized, insecure and subservient (Fisher, 1969; Fisher & Howell, 1970). Pedophiles also tend to be uneducated and subservient (Gebhard, 1964) and are socially introverted (Langevin et al., 1978). Pedophiles have a trimodal age distribution with

frequency of sexual offenses peaking at ages 15-19, 34, and 55 (Mohr, 1981). Pedophiles also have a higher recidivism rate than do comparable heterosexual offenders (Fitch, 1962). There were vast discrepancies (ranging from 0-58%) between the child's version and an offender's description of an incident involving violence. These discrepancies were probably due to the different sources of data (Gebhard et al.; De Francis, 1969; Abel et al., 1979; Christie et al., 1978).

Quinsey (1977) summarized the psychological test data from pedophilia research from 1960-1977 as follows: "The data portray child molesters as unassertive, guarded, moralistic and guilt-ridden."

Other studies of pedophile samples focused on more specific aspects of pedophilia. For example, Krajacich (1983) used the Sex Knowledge and Attitude Test, the Sex Inventory and the modified Heterosexual Behavior Assessment Scale to explore the following aspects of pedophile sexuality: (a) physiological, psychological and social aspects of sexuality; (b) sexual attitudes, interests, adjustments, conflicts and controls; (c) heterosexual behavior and experience. He used three groups of volunteer subjects: one group of 20 court-referred pedophiles, one group of 20 non-sex offenders and one group of 20 non-offenders. All of

the groups were matched for sex, education and intelligence. Krajacich (1983) found significant differences between the pedophile and control groups with respect to sexual attitudes and sexual experience. The pedophiles, compared to the other two groups, reported higher levels of sexual maladjustment and frustration and had more conservative views about pre and extramarital sexual encounters.

Generalizations of these results was limited by subject bias and measurement limitations. The subject groups were unmatched with respect to age. Volunteers, they were not randomly selected. The first two groups represented an institutionalized population and the third group represented nonoffenders. It is possible that differences among these groups were attributable to institutionalization effects, rather than sexual preferences. Further subject bias was introduced by the lack of information about the object of the pedophiles' attraction. A person who is attracted to a seven year old boy may be very different from one attracted to a 16 year old girl.

Measurement limitations in Krajacich's study included forced reliance upon self-report inventories. This may have resulted in problems such as social desirability, acquiescent response style and

discrepancies between verbal and actual behaviors. Secondly, the researcher provided no validity data on the Sex Knowledge and Attitude Test and no validity or reliability data on the modified Heterosexual Behavior Assessment Scale.

In spite of these limitations, Krajacich's findings that the pedophiles in his study were sexually maladjusted and frustrated and had conservative views about pre and extramarital sex raise interesting questions for further research: Why were they maladjusted and frustrated? Why were they conservative? Are other pedophiles like this?

In another study, Pittman (1982) investigated different personality variables, measured by the MMPI, between 15 court-referred pedophiles and 15 males charged with incest. Pittman conducted a one-way ANOVA to indicate scale by scale differences on the four validity and 10 clinical scales of the MMPI. He then carried out a discriminant analysis to indicate relative significant and non significant MMPI scales for the two groups independent of one another. The results of the discriminant analysis were also used to reclassify subjects into either the pedophile or incest group. The results of these analyses suggested that pedophiles scored significantly higher only on scale 2

(Depression). The discriminant analysis was "successful" in differentiating the two groups and in correctly classifying individuals into one of the two groups a high percentage of the time.

The results, however, must be interpreted cautiously. There was subject bias. One criterion for inclusion in the study was that the subjects be adult, married males with one natural or adopted child living with them. While this may have been an appropritate criterion for the incestuous group, the exclusion of single, childless pedophiles from the study resulted in an unrepresentative sample. Further subject bias was introduced by the use of a volunteer and institutionalized sample.

The researcher's introduction, conclusion and discussion were unorganized, digressive and difficult to follow. He offered no alternate explanations for his results, did not discuss the limitations inherent in his design, and did not integrate his findings with the literature in this area.

Pittman's study, however, represents one of the few attempts to differentiate pedophilia from another seemingly similar paraphilia. These groups are usually classified together. Although incestuous offenders are contained within the pedophile category there may be

important differences between the groups.

Further research includes Roby's (1982) comparison of 10 court-referred non-aggressive pedophiles with 14 rapists and 12 nonoffenders on the MMPI, the Buss-Durkee Hostility Inventory (BDHI) and the Megargee Overcontrolled Hostility Scale (MOHS). The rapists scored significantly higher than the pedophiles on only one MMPI scale, Mf (Masculinity-Femininity), and significantly higher than the nonoffenders on the L (Lie), D (Depression), Hy (Conversion Hysteria), Pd (Psychopathic Deviate) and Mf (Masculinity-Femininity) scales. Pedophiles scored higher (but not significantly) than the rapists on the Si (Social Introversion) scale and than the nonoffenders on the F (Frequency or Confusion), D and Pd scales. Both the rapists and the pedophile groups' BDHI hostility scores were significantly higher than those of the nonoffender group, but there was no significant difference between the offender groups on this score. There were no significant differences between any of the groups on overcontrolled hostility scores.

In a second part of his study, Roby (1982) compared 12 pedophiles with 12 nonoffenders and 20 rapists on the Conceptual Grid (Kelly) and two hostility scales. The rapists and the pedophiles had a

more negative self-image than did the nonoffenders. While the rapists perceived both parents negatively, the pedophiles perceived their fathers more negatively and their mothers more positively than did either of the other groups. Data from one of the hostility scales suggested that rapists were more hostile than nonoffenders, although not significantly different from the pedophiles.

This study was not without shortcomings. The methods would be difficult to replicate. Subjects were drawn from persons incarcerated at Atascadero State Prison who were routinely given a battery of tests upon admission. While the MMPI was among this battery, it is not clear which other instruments were used in this study, nor is it clear who administered them. The researcher did not provide a rationale for his choice of instruments and did not describe their validity or reliability. There was subject bias. They were institutionalized volunteers. Finally, the subject groups were unequal and small in size and unmatched with respect to demographic characteristics.

In spite of the shortcomings in Roby's research, his findings raise interesting questions for further research: Do other pedophiles perceive their fathers negatively and their mothers positively? How might

this influence sexual orientation? How does this tie in with theory (e.g. psychoanalytic)?

In another study, Fisher and Howell (1970) compared the psychological needs of 50 subjects convicted of homosexual pedophilia, using the Edwards Personal Preference Schedule (EPPS), with both heterosexual pedophiles and normal adult males. Analysis of EPPS scores suggested that the homosexual and heterosexual pedophiles had somewhat similar need structures and that these two groups had different needs than the normal group. The pedophile groups were low in achievement orientation, unorganized, low in inner direction and assertiveness, guilt-ridden, had a need to nurture and were analytically introspective. An inconsistent and unexplained finding was that the homosexual group had a higher heterosexual drive than the other groups. The researchers were only able to describe one study in their literature review as, at the time, little work had been done on objective testing of pedophiles.

The most serious limitations to generalizability in this study was sample bias. The subjects were 50 convicted pedophiles examined in order of admission at a receiving center of the California Department of Corrections. Preceding their imprisonment, 90% of

these men had been observed for 90 days at a California institution specializing in the treatment of sex offenders, and had been rejected as unsuitable for their treatment program.

Unlike much of the research on pedophiles, Fisher & Howell made an attempt to differentiate homosexual pedophiles and heterosexual pedophiles. The question raised in their study, about why homosexual pedophiles had a higher heterosexual drive than the other groups, is an interesting one for continued research with this population.

While the Fisher & Howell (1970) research focused on newly-admitted pedophiles, Peters' study (1976) attempted to develop a personality profile of pedophiles by administering a battery of tests to 224 newly-released probationed male adult sex offenders (rapists, pedophiles, exhibitionists, homosexuals). In comparison to the other three groups, the pedophiles had: the lowest mean IQ (94.5) and a score significantly lower than that of the exhibitionists (101.2) on the Revised Beta Examination. The pedophiles also had a greater tendency to somatize affective problems, and were less competitive on the Cornell Medical Index (although these results were not significant). The pedophile group had less ego

integration and maturity than the homosexuals and exhibitionists, but significantly higher ego integration and maturity than the rapists on the Bender Gestalt tests. In drawings produced for the House-Tree-Person Test the pedophiles were significantly more anxious about their bodily structure and functioning than the exhibitionists group . They were significantly more submissive than the rapists on the Cattell Personality Inventory and were significantly more passive than the rapists on the Rorschach. Finally, the pedophile group had significantly higher self-esteem than the homosexuals on the Self-Rating Scale.

Peters did not present a literature review in his article. Rather, he began with a discussion of the importance of distinguishing between fantasy and fact in child sexuality, citing Freud and clinical case material. His study would be difficult to replicate. It was not clear how or by whom measures were administered or interpreted. He did not describe his subjects demographically or quantitatively. He didn't state how many subjects were in each of the other groups. He didn't differentiate pedophiles from incestuous subjects. It wasn't clear why homosexuals were categorized as offenders.

There was further subject bias. All groups of offenders used in this study scored in the pathological range on the Cornell Medical Index. Peters' measures were seemingly not counterbalanced. Validity and reliability of the measures were unclear. He did not describe his statistical analysis and presented no tables or figures. Finally, the researcher promoted non-significant trends to findings.

In spite of these methodological shortcomings Peters provided a more comprehensive picture of pedophiles than most other researchers. His test battery included measures of cognitive, personality and motor functioning.

In contrast to this variety of paraphiliac comparison groups, Fisher & Howell (1970) found that, compared to a normal adult male group, pedophiles had lower needs for achievement and assertion and higher needs to nurture and to introspect.

One study using a patient population (Eskapa, 1984) investigated differences between pedophiles and non-pedophiles in sexual attributional style, general attributional style, locus of control and self-esteem. Eskapa found significant differences between the groups on attribution for sexual arousal to adults and adult women on dimensions of internality and stability.

Pedophiles tended to attribute sexual arousal to internal and stable factors (i.e. ability) while non-pedophiles tended to attribute it to external and unstable factors (e.g. effort). He also found significant differences on attribution for bad and good outcomes. Unlike non-pedophiles, pedophiles made internal attributions for good outcomes. There were no significant differences, however, with respect to locus of control and self-esteem measures. As with other studies in this area, subject bias limited generalizability of the findings. The "institutionalization-effect" may have been an important influence upon outcome measures.

Eskapa, however, demonstrates how Social Psychology theories (Attribution theory, in this case) have potential research applications with a paraphilic population.

In another study 137 pedophiles were clinically studied at the Boston City Hospital over a two year period (Groth & Burgess, 1977). The following clinical typology was developed, based upon 137 convicted pedophile reports, 74 child reports and police reports. Aggression, rather than sexuality was the primary issue in pedophilia. Aggression is inhibited and suppressed, eroticized and channeled into power and control over a

child. They found that issues of dominance, power, authority, control, aggression and sadism were involved in varying degrees, and sex was categorized as enticement and/or entrapment of the child (in 55% of the cases) or as force through intimidation, exploitation and/or aggression (in 45% of the cases). The researchers pointed out that identifying the motivation of the adult is important in determining whether the child is a victim of the man's inappropriate love-attraction, his needs for power and control and/or his expression of anger and rage. The immediate and long term physical and psychological consequences for the child differ depending on the type of issues involved, according to Groth and Burgess.

The data were generated from three sources: adult reports, child reports, and police reports, thereby increasing the validity and reliability of the clinical reports and the generalizability of their results. Their assesssments, however, were not based on any objective test data. The sampling bias precluded generalizability of their findings.

Social Background Studies

Freund (1982) briefly reviewed the findings of studies on pedophiliac's personality, age, recidivism, violence and family background. These findings can be

summarized as follows: (a) pedophiles have distant fathers (Mohr, 1982); (b) poor relationships with both parents (Gebhard & Gagnon, 1964) and (c) feel inadequate, passive, dependent, low in achievement orientation, unorganized, insecure and subservient (Fisher, 1969; Fisher & Howell, 1970). Pedophiles also tend to be uneducated and subservient (Gebhard, 1964) and are socially introverted (Langevin et al., 1978). Pedophiles have a trimodal age distribution with frequency of sexual offenses peaking at ages 15-19, 34, and 55 (Mohr, 1981). Pedophiles also have a higher recidivism rate than do comparable heterosexual offenders (Fitch, 1962). There were vast discrepancies (ranging from 0-58%) between the child's version and an offender's description of an incident involving violence. These discrepancies were probably due to the different sources of data (Gebhard et al.; De Francis, 1969; Abel et al., 1979; Christie et al., 1978).

In a study of family relationships, Roby (1982) compared 12 pedophiles with 12 nonoffenders and 20 rapists on the Conceptual Grid (Kelly) and two hostility scales. The rapists and the pedophiles had a more negative self-image than did the nonoffenders. While the rapists perceived both parents negatively, the pedophiles perceived their fathers more negatively

and their mothers more positively than did either of the other groups. Data from one of the hostility scales suggested that rapists were more hostile than nonoffenders, although not significantly different from the pedophiles.

This study was not without shortcomings. The methods would be difficult to replicate. Subjects were drawn from persons incarcerated at Atascadero State Prison who were routinely given a battery of tests upon admission. The researcher did not provide a rationale for his choice of instruments and did not describe their validity or reliability. There was subject bias. They were institutionalized volunteers. Finally, the subject groups were unequal and small in size and unmatched with respect to demographic characteristics.

In spite of the shortcomings in Roby's research, his findings raise interesting questions for further research: Do other pedophiles perceive their fathers negatively and their mothers positively? How might this influence sexual orientation? How does this tie in with theory (e.g. psychoanalytic)?

In another study, Myers and Berah (1983) compared personality variables of a group of 65 Australian pedophiles with 45 exhibitionist offenders undergoing presentence psychiatric assessments. Their data, based

on clinical assessments, suggested that the two groups represented different populations. The pedophiles, compared with the exhibitionists, were older and came from less stable and harmonious families and had inferior education and work records.

There were several methodological limitations in this research. Response bias and sample distortion may have been present in using an involuntary court-referred psychiatric sample. The groups were of unequal size. The researchers' literature review was sketchy and focused primarily on exhibitionists. It contained no review of the pedophile literature. The subjects were aware that information given to the clinician/researcher would be used in court, thereby introducing further bias. Additionally, this information was obtained from semi-structured interview data reported by different clinicians in clinical case files over a one year period, thereby posing threats to internal valididty and reliability. No objective data were collected. It would be difficult to replicate this study as the precise clinical data collected during the subjects interviews were not described. The authors did not present their data in any tables. Their discussion is limited to a description of their findings with no integration of these results into the

existing literature.

The Myers and Berah study, however, represents one of the few attempts to investigate the family backgrounds of pedophiles. Their results raise questions for future research: Do other pedophiles come from unstable families? How might this affect sexual orientation?

Freund and Blanchard's study (1983) also focused on patients' family backgrounds. They compared the retrospective reports of father-son relationships of four groups of adult males: (a) 50 heterosexuals (b) 40 homosexuals (c) 48 heterosexual pedophiles (d) 56 homosexual pedophiles. The heterosexuals were paid volunteers and the other three groups were patients. The homosexuals were the only group to report significantly poorer father-son relationships. The authors suggested that these results may be attributed to the homosexual son's atypical childhood gender identity or behavior, rather than to the son's erotic preference for male partners.

This study was difficult to follow. The Introduction was disorganized and digressive. The subjects, once again, were a biased sample. Some of the subjects were paid volunteers and some were resistant patients referred under pressure to the

Clarke Institute of Psychiatry. Their educational levels ranged between 8 and 12 grades completed. Father-son relationships were measured by embedding the Father-Son Distance Scale within a version of the senior author's unpublished Erotic Preference Examination Scheme, with undetermined reliability and validity. The results of their assessments were not presented in table or figure form.

In spite of these limitations, Freund & Blanchard, like Roby (1982), investigated important and seldom raised background questions about pedophiles' relationships with their parents. The discrepancy in results between this study and the Roby study may be due to the different comparison groups and different measures used.

In contrast to previous studies' focus on self-reports of family relationships, Gaffney, Lurie and Berlin (1984) conducted a double-blind family history comparison of the incidence of paraphilia in relatives of pedophile and nonpedophile paraphiliac inpatients. Both groups had similar demographic characteristics, except that pedophiles had a later onset of "illness" and were older at hospitalization. All of the patients were males at the Johns Hopkins Sexual Disorders Clinic who had been treated at some

period between 1980 and 1983. A review of 33 records indicated that some type of paraphilia was found in 18.5% of the pedophile patients' families. Pedophilia was found in five of the 33 families of pedophiles. Only 3% of a psychiatric control group (21 male inpatients meeting DSM III criteria for depression) had a family member with paraphilia. Pedophilia was found in one of the 21 families of nonpedophile paraphiliacs. These results were statistically significant. The researchers stated that these results suggest that pedophilia is familial, although the manner of transmission is unclear.

The authors however did not include a literature review in their article as they claimed that there were no systematic studies of familial patterns of sexual deviance. Their small sample of inpatients may have increased the likelihood of sample distortion and response bias. The records selected for review were not a random sample of patients treated at the clinic. Rather, they were evaluated by different persons to assess criteria for inclusion in the sample. Secondly, clinical data that were in the records had been generated by different clinicians, threatening internal validity. Also, the Family History Research Diagnostic Criteria (FHRDC) was used to diagnose family members.

There was no validity or reliability data provided on this instrument. It was not clear that a depressed, hospitalized psychiatric population was an appropriate comparison group nor was it clear why the pedophile and depressed groups were of unequal sizes. While this study was not without shortcomings, it did generate new avenues of exploration for understanding the pedophile phenomenon: Is pedophilia familial? If so, how is it transmitted?

Summary and Hypotheses

Biological Studies and Hypotheses.

Biological factors may influence sexual behavior. The extremely low incidence of female pedophilia, for example, may in part be explainable by organic factors. Biological assessments of small samples of pedophiles suggest the presence of endocrinological abnormalities in seven pedophile patients when compared with five non-pedophile patients and five normal control males (Gaffney & Berlin, 1984). Chromosomal anomalies were found in a number of the 18 homosexual pedophiles studied at Johns Hopkins Hospital (Berlin & Schaerf, 1985).

Hypothesis 1: Pedophiles will have a significantly higher incidence of chromosomal anomolies than will other paraphiliacs.

Hypothesis 2: Pedophiles will have a significantly higher incidence of hormonal irregularities than will other paraphiliacs.

Psychological Studies and Hypothesis.

Existing studies show conflicting data describing the pedophile-at-large population. Unrepresentative samples of European pedophiles-at-large can be cautiously described as more introverted, neurotic, sensitive, shy, lonely, depressed and humorless than an age-matched male control group (Wilson et al., 1983). A comparable international group of politically and socially active pedophiles were shown to be educated, satisfied with their sexual orientation and as having had their first pedophile contact during adolescence (Bernhard, 1975).

There are also many incongruent findings in the literature on court-referred pedophiles. For example, Danna (1984) describes a wide range of professional and semi-professional occupations represented by pedophiles - yet 20 years earlier Gebhard (1964) concluded that pedophiles were uneducated and simple-minded.

In addition to incongruent findings, another problem that makes it difficult to get a clear consistent psychological picture of pedophiles is that they are so often compared with different groups.

Pedophiles can be cautiously described as: coming from less stable families than an Exhibitionist group (Myers & Berah, 1983); feeling more hostile and having a more negative self-image than a non-offender group (Roby, 1982); feeling more depressed than a group of incestuous offenders (Pittman, 1982); behaving more passively and submissively than a rapist group (Peters, 1976); and feeling more sexually maladjusted than a non-sex offender group (Krajacich, 1983). Compared to non-pedophiles, samples of institutionalized pedophiles have been described as personalizing the outcome of events in their lives (Eskapa, 1983).

In contrast to this variety of paraphiliac comparison groups, Fisher & Howell (1970) found that, compared to a normal adult male group, pedophiles had lower needs for achievement and assertion and higher needs to nurture and to introspect.

Groth & Burgess (1977) offer a clinical formulation in an attempt to identify the motivation of pedophiles: aggression rather than sexuality is the primary issue in pedophilia; aggression is inhibited and suppressed, eroticized and channeled into power and control over a child.

The psychological variables selected for analysis in this study represent recurrent descriptions from the

literature.

Hypothesis 3: Pedophiles will have significantly higher scores on the Social introversion, Psychopathic deviate, Dominance, Depression and Psyasthenia scales of the MMPI than will other paraphiliacs.

Social Background Studies and Hypotheses.

There are three sources for the social variables selected for analysis in this study. These sources are research, theory and interviews with expert clinicians in the field.

The subjective assessment of variables and the small, institutionalized and biased samples that were used limit generalization of research results.

Gaffney, Lurie & Berlin (1984) found a significantly higher incidence of pedophile relatives in a hospitalized pedophile group than in a depressed inpatient group. Myers & Berah (1983) found that pedophiles come from less stable families than exhibitionists. Roby (1982) found that a pedophile group perceived their fathers more negatively and their mothers more positively than did a rapist or a nonoffenders group. In 1982 Freund reported that a pedophile group had distant fathers and in 1983 Freund & Blanchard found that another pedophile group did not have poor relationships with their fathers.

Hypothesis 4: Pedophiles will have a significantly higher incidence of familial pedophilia than will other paraphiliacs.

Psychoanalytic theory views a boy's feelings towards his mother and his resolution of the Oedipus conflict through identification with his father as a critical determinant of adult relations and attitudes toward mature heterosexual relationships. If a boy's father is physically and/or emotionally unavailable, satisfactory resolution of this conflict may not occur.

Hypothesis 5: Pedophiles will have a significantly higher incidence of father absence and/or emotional distance during childhood than will other paraphiliacs.

Hypothesis 6: Pedophiles will have a significantly higher incidence of mother absence and/or emotional distance during childhood than will other paraphiliacs.

Hypothesis 7: Pedophiles will have a significantly higher incidence of losses during childhood than will other paraphiliacs.

Bandura's Social Learning Theory describes learning as occuring in part through observation and modeling. This theory supports the "hunches" of expert clinicians and researchers in this field who were interviewed for this study. They suggest that pedophiles were often sexually victimized as

children and that these adult-child encounters were models for intimacy.

Hypothesis 8: Pedophiles will have a significantly higher incidence of childhood sexual victimization than will other paraphiliacs.

Hypothesis 9: Pedophiles will have a significantly higher incidence of incestuous involvement with their children than will other paraphiliacs.

The remaining social variable, the unlikely use of violence by pedophiles, is partly a hunch, suggested by interviewed clinicians and researchers. It is supported by research suggesting that pedophiles have high needs to nurture (Fisher & Howell, 1970).

Hypothesis 10: Pedophiles will have a significantly lower incidence of use of violence than will other paraphiliacs.

Path Model and Hypotheses:

A pedophile may have biological vulnerabilities (chromosomal and hormonal) that affect his sexual and psychological behavior (Figure 2). If, during his childhood, he also experiences significant losses and has an emotionally unavailable father and a relative who is a pedophile, he may feel vulnerable and responsive to the intimacy, affection and nurturing offered by a man or a pedophile relative. Perhaps this

is his only model of intimacy. He may become a "childhood victim". Secondly, he may feel depressed and angry and perhaps responsible for the losses he's experienced and the innappropriate relationship in which he's involved. He may withdraw and become introverted.

Given this background of biological and psychological vulnerabilities and social experiences, by the time this child reaches adulthood he may have difficulty establishing and maintaining mature heterosexual relationships. Rather, he might seek a less demanding child partner who is as vulnerable and receptive as he was as a child. He would not be violent because he is seeking intimacy and identifies with the child.

Hypothesis 11: A pattern of correlations among the above stated variables should result in the relationships described in Path Model I (Figure 2).

Hypothesis 12: A pattern of correlations among the above stated variables should result in the relationships described in Path Model II (Figure 3).

Purpose of Study

The data for this study were drawn from a review of charts of former male patients at Johns Hopkins Hospital Sexual Disorders Clinic, a unit specializing

in the treatment of sexual deviance. The variables selected for analysis in this study represented an integration of specific biological, psychological and social variables, drawn from paraphilic research and theory, that may predispose a man to a pedophiliac sexual orientation.

Specifically, an effort was made to diffentiate pedophiles from non-pedophiles on the basis of the constitutional, psychological, and historical life experiences that play a role in the development of sexual orientation. The goal of this research was to provide a better etiological understanding of this population, thereby providing bases for treatment and an integral link with theory.

Chapter III

METHOD

Subjects

Subjects' records were drawn for review from a population of approximately 1500 charts of former male patients at Johns Hopkins Hospital Sexual Disorders Clinic, a unit specializing in the treatment of sexual deviancy. 211 subjects met the criteria for inclusion in this study (see Procedures). Their ages ranged from 21-70. Subjects were grouped into six categories based upon the DSM III-R diagnosis in their charts. (a) homosexual pedophiles (n=64); (b) heterosexual pedophiles (n=41); (c) bisexual pedophiles (n=10); (d) exhibitionists (n=41); (e) sexual sadists (n=21); (f) and an "atypical" group composed of men with fetishes, voyeurs, and obscene phone callers (n=34). Sources of referral to the clinic were also varied and included: (a) self (b) attorney (c) probation officer (d) states attorney (e) therapists and (f) family members.

Procedures

Records of inpatients who had been at the Johns Hopkins Sexual Disorders Clinic between 1980 and 1988 were reviewed. All patients were male, aged 21-70, and

met the DSM III criteria for a paraphilia. The following criteria for inclusion in this study were determined from patient charts: (a) Diagnosis of Pedophilia or other Paraphilia, (b) Comprehensive social history data, and (c) Laboratory data. Subjects with additional diagnoses of Schizophrenia, Bipolar disorder, Mental Retardation or with multiple paraphiliac diagnoses were not included. Any subject's file who met all of the criteria for inclusion was pulled for the present study. The MMPI, originally included as one of the criteria for inclusion, had to be omitted from the inclusion criteria for this study because the Johns Hopkins Sexual Disorders Clinic, it was discovered, had not routinely administered this instrument upon patient admission. While only 14 subjects had MMPI profiles recorded in their charts and met all of the other inclusion criteria, an additional 197 subjects met all of the inclusion criteria except for the MMPI. Therefore, the 14 subjects' MMPI scores were recorded and analyzed and demographic, social and biological data were recorded and analyzed for all 211 subjects.

Confidentiality was protected by assigning each of the six clinical groups a letter code and each subject a number code. Subject one in the Pedophile group was

coded P1, subject two in the Pedophile group was P2, Subject 3 was P3 and so on. Subject one in the Sexual Sadist group was S1, subject two in the Sexual Sadist group was S2 and so on. Subject one in the Exhibitionist group was E1, subject two was E2 and so on. No names were included after the coding procedure was completed. Subjects names, however, appeared throughout the charts and police reports, precluding a completely blind rating. In any event, the subjects were not known to the experimenters.

The researcher reviewed those charts that met the criteria for inclusion. Each subject was assigned an identification code. The specific demographic, biological, and psychological variables that were the focus of this study were recorded by the researcher (Appendix A). Biological variables (chromosomal and hormonal factors) were evaluated by the researcher from a review of specific endocrine lab test results in the subjects' charts. Psychological variables were taken from MMPI profiles in the charts. The social background variables (i.e. availability of father and mother, familial pedophilia, history of sexual victimization, childhood losses of parents, incest and violence) were measured and recorded by two raters on a separate coding sheet for each subject (Appendix B).

These social data were taken from subjects' histories in their charts (Appendix D).

Coding Procedures. Two independent raters (R1 and R2) scored social variables from a review of subjects' chart histories. History and police reports were separated from other clinical data, (i.e. patient names, in so far as possible, and diagnoses). Raters also reviewed police reports to measure subjects' use of violence in offenses. The researcher was R1. R2 was a psychiatric resident. The researcher trained R2 in the use of the coding sheet (Appendix B) by going through sample chart histories together and answering questions from the coding sheet. The raters discussed their answers together until they reached agreement. During these discussions they realized that the wording of one of the questions (the question about losses) was unclear (see Appendix B). Choices 2, father or mother is not in the home; 3, neither parent is in the home; and 4, parent, grandparent or other adult who helped to raise the child left the home or died before the child reached age 14, were overlapping and redundant. The choices were clarified and consolidated so that the choices were dichotomous: loss (of either or both parents or adult who helped raise the child through death, divorce or leaving the home

before the child reached age 14); or no loss (father and mother are in the home).

After the training and clarification phase the pilot study was begun. Each rater was given a separate coding sheet (see Appendix B) for each of 18 subjects (subjects in the pilot study were a random sub-sample of subjects used in the final study). Each coding sheet had a rater code and a subject code so that inter-rater reliability could be determined for each of the social variables. This was done through a comparison of R1,P1-k and R2,P1-k scores, R1,S1-k and R2,S1-k scores and so on for the social variables. Next, subjects' charts were randomly distributed to the two raters for scoring of social variables.

Inter-rater reliability

Before the social variables were assessed two independent raters scored items in a pilot study of 18 subjects to establish inter-rater reliability. Guttman split-half reliability was .81 and Spearman-Brown r was .82, suggesting that there was a high degree of consistency between the raters' scoring of the social variables (Appendix C).

Operational Definitions: Variables and Measures

The following operational definitions were used to classify subjects and to clarify and measure variables.

Paraphilia. Individuals who have a deviation (para) in objects to which they are attracted (philia). In addition to Pedophilia, DSM III-R includes Fetishism, Transvestism, Zoophilia, Exhibitionism, Voyeurism, Sexual Masochism, Sexual Sadism, and Atypical Paraphilias in this diagnostic category. DSM III-R diagnostic criteria for a specific paraphiliac diagnosis were used here as an operational definition of each group.

Pedophile. DSM III-R criteria, all of which must be met for a diagnosis of pedophilia, were used. These criteria are:

1. Over a period of at least six months, recurrent intense sexual urges and sexually arousing fantasies involving sexual activity with a prepubescent child or children (generally age 13 or younger).

2. The person has acted on these urges, or is markedly distressed by them.

3. The person is at least 16 years old and at least 5 years older than the child or children in 1.

As the entire subject pool was male, in cases of Homosexual Pedophilia the child or children were male. In cases of Heterosexual Pedophilia the child or children were female. In cases of Incest, the child or children were family members. In cases of Bisexual

Pedophilia, the child or children were either male or female.

Exhibitionism. DSM III-R criteria, all of which must be met for a diagnosis of exhibitionism, were used. These criteria are:

1. Over a period of at least six months, recurrent intense sexual urges and sexually arousing fantasies involving the exposure of one's genitals to an unsuspecting stranger.

2. The person has acted on these urges, or is markedly distressed by them.

Sexual Sadism. DSM III-R criteria, all of which must be met for a diagnosis of sexual sadism, were used. These criteria are:

1. Over a period of at least six months, recurrent intense sexual urges and sexually arousing fantasies involving acts (real, not simulated) in which the psychological or physical suffering (including humiliation) of the victim is sexually exciting to the person.

2. The person has acted on these urges, or is markedly distressed by them.

Atypical Paraphilia. The DSM III-R labels this category of sexual offender "Paraphilia Not Otherwise Specified". These paraphiliacs do not meet the

criteria for any of the specific categories. It includes telephone scatologia (lewdness), necrophilia (corpses), partialism (exclusive focus on part of body), coprophilia (feces), klismaphilia (enemas), urophilia (urine). In this study voyeurs and men with fetishes were also included in this diagnostic category.

Demographic Data. Age, birth order, race, marital status, number of children, education, occupation, income, source of referral, arrest record and religion were recorded for each subject from a review of charts (see Coding sheet in Appendix A).

Chromosomal Anomalies. Presence of Klinefelter's Syndrome; a person with Klinefelter's Syndrome is born with small, infertile genitals and has an XXY karotype. It is unclear whether this person is a man with an extra X chromosome or a woman with an extra Y chromosome. This variable was measured by endocrine lab test results and diagnoses from the patients' charts.

Hormonal Irregularities. Hypothalamic-Pituitary-Gonadal dysfunction as measured by marked elevation of luteinising hormone (LH), follicle stimulating hormone (FSH) and testosterone. There is a complex interaction between the hypothalamus, pituitary

gland, and the testes. Testosterone is produced by cells in the testes and is controlled by Synthetic Luteinising Hormone-releasing Hormone (LHRH) which is produced by the hypothalamus and stimulates the release of Luteinising Hormone (LH) by the pituitary gland. Sperm production by the testes may also be controlled by FSH production in the pituitary gland and by "inhibin", another hormone produced by the testes which inhibits FSH production. LH, FSH, and testosterone, therefore, are hormones that are a part of the endocrine regulatory system. Unusual sexual interests or difficulties in sexual behavior control may be associated with disturbances of this regulatory system (Berlin & Schaerf, 1985). Data were taken from endocrine urine and blood lab test results in patients' charts. The normal testosterone level for adult males is 575 + or minus 150 fd. The normal FSH level for adult males is 1.5-16 mlu/ml. The normal LH level for adult males is 3.9-18 mlu/ml. Fd and mlu/ml are standard units of measurement per mililiter.

Aggression. Anger, rebelliousness, cynical and antisocial fighting out as measured by the Psychopathic deviate (Pd) scale of the MMPI (t=70).

Depression. Serious, low in morale, unhappy, self-dissatisfied; as measured by the Depression(D)

scale on the MMPI (t=70).

Introversion. Unnassertive, withdrawn, self-conscious, shy; as measured by the Social Introversion (Si) scale on the MMPI (t=70).

Moralistic. Rigid and meticulous; anxious, worrisome and apprehensive, guilt feelings, as measured by the Psychasthenia (Pt) scale on the MMPI (t=70).

Family and Social History. These were historical data generated from a semistructured interview (see Appendix D) used at the Phipps Clinic, Johns Hopkins Hospital. Patient interviews were conducted by resident and attending physicians.

Familial Pedophilia. A father, grandfather or uncle who is or was a pedophile. This variable was measured by two raters (see Procedures section) through a review of family history data.

Availability of Father. Fathers' absence and/or distance during childhood. This variable was measured by two raters (see Procedures section) through a review of family history data.

Availability of Mother. Mothers' absence and/or distance during childhood. This variable was measured by two raters (see Procedures section) through a review of family history data.

History of sexual victimization. At least one

incidence of sexual involvement with an adult before age 14. This variable was measured by two raters (see Procedures section) through a review of family history data.

Losses. Separation and/or divorce or death of parent/s during childhood. This variable was measured by two raters (see Procedures section) through a review of family history data.

Violence. Use of a weapon, violence or degredation of victim. This variable was measured by two raters (see Procedures section) through a review of police reports.

Instruments

The Minnesota Multiphasic Personality Inventory (MMPI). The MMPI is one of the most widely used and researched personality inventories (Anastasi, 1988). The MMPI consists of 566 true-false self reference statements to assess personality. Scoring of the four validity scales, 10 clinical or personality scales and the 12 research scales yields a profile which serves as a basis for generating inferences about the test taker.

Although the MMPI was originally developed through empirical criterion keying in the 1930's (to differentially diagnose psychiatric patients), it is currently used to generate descriptions of and

inferences about a wide range of individuals. This expanded use has been accomplished by clinical experience and thousands of empirical item analysis studies that differentiate between criterion groups and have identified the correlates of each scale (Graham, 1977). When an individual obtains a particular scale score, characteristics and behaviors can be attributed to that person on the basis of previous research and experience.

Through a process of accumulation of empirical data about individuals who display each profile pattern or code, considerable evidence of the construct validity of each MMPI code has accumulated (Anastasi,1988).

Results of the MMPI are reported in the form of standard scores with a mean of 50 and a standard deviation of 10. Any score of 70 or higher - falling two or nore standard deviations above the mean - is generally considered as the cutoff point for the identification of severe pathological deviations Anastasi, 1988).

One of the limitations of the MMPI is the variation in reliabilities. According to Anastasi (1988) the manual reports a wide range of retest and split-half reliabilites (.50's to .90's) on normal and

abnormal adult samples. This is probably attributable to the heterogeneity of item content of the scales, the variablity of assessed behavior over time (e.g. depression) and the intercorrelation of scale scores.

The MMPI has been widely used to study sexually deviant criminal offenses. With the exception of an elevated Psychopathic deviate (Pd) scale, results have been inconsistent (Rader, 1977; Karacen, 1974; Panton, 1958; Rada, 1978; Schmidt, 1945; Swenson & Grimes, 1958; Armentrout & Hanes, 1978; Anderson & Kunce, 1979).

Rader (1977) for example, found that rapists scored significantly higher than exhibitionists on the F, Hs, D, Hy, Pd and Sc scales whereas Karacen, Williams, Guerrero, Salis, Thornby & Hursch (1974) found that 12 rapists scored significantly higher than 12 prison controls and 12 normal controls on the Pd, Ma, and D scales. Panton (1958) and Rada (1978) on the other hand, did not find significant differences on the MMPI between rapists and various control groups. Schmidt (1945), who did not differentiate among sexual offenders, found elevated Mf, Pa, Sc scales. Swenson and Grimes (1958) found an elevated Pd scale among 45 undifferentiated sexual offenders. Armentrout and Hauer (1978) found an elevated Pd scale among the

rapist and nonrapist sexual offender groups studied. Anderson and Kunce (1979) analyzed MMPI profiles of 92 sex offenders who had been institutionalized for psychiatric evaluation. Anderson and Kunce found that 88 of the subjects could be categorized into one of three profiles: F, Sc; Pd, Ma; or D, Pd.

This lack of consistency among studies does not indicate that differences do not exist among the paraphilias. Rather, most of the MMPI research on sexual offenders have not been comparable because of different control groups, biased samples, contamination of experimental groups and general treatment of all of the paraphilias as a single group. Thus a characterization of sexual offenders based upon the MMPI is not now possible.

Analyses

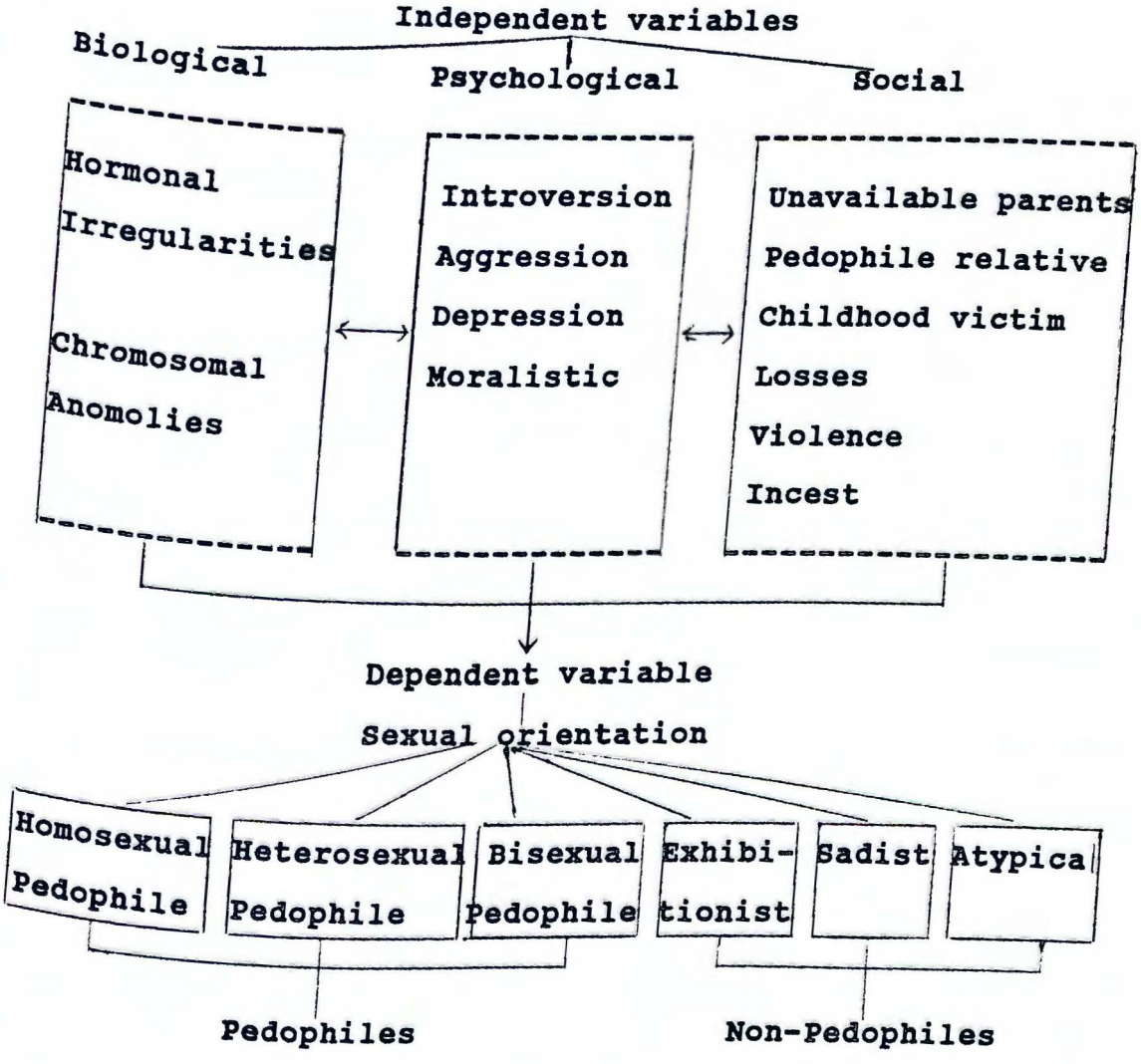
Discriminant Analysis. The principle analysis for this study was a stepwise discriminant analysis in which sexual orientation was the dependent variable. The biological, psychological, and social independent variables, respectively, were: (a) hormonal irregulatities, chromosomal anomalies (b) introversion, aggression, depression, and moralistic attitudes and (c) incest, relationship with mother and father, familial pedophilia, childhood sexual

victimization, losses, use of violence (see Figure 1). This analysis enabled the researcher to explain how much of the variability in the dependent variable (sexual orientation) was accounted for by each of the independent variables. The goal was to determine the best combination of variables to differentiate pedophiles from other sexual offenders and to differentiate all of the sexual offender groups.

The stepwise discriminant analysis was done in two ways. First, the six paraphilic groups (Homosexual pedophiles, Heterosexual pedophiles, Bisexual pedophiles, Exhibitionists, Sadists, Atypical paraphilics) were compared with one another. Second, the six groups were combined into two categories representing pedophiles and non-pedophiles. The pedophile category was composed of the homosexual pedophiles, heterosexual pedophiles and bisexual pedophile groups. The non-pedophile category was composed of exhibitionists, sadists and the atypical groups. A discriminant analysis was performed by a stepwise selection of the biological, social and demographic variables that discriminated, first, among the six groups of sexual offenders, and second, between the pedophile and non-pedophile groups.

Figure 1

Model of Stepwise Discriminant Analysis



Path Analysis. Next, the biological, psychological, and social variables in the proposed model (Figure 1) were tested through path analysis, a method for studying the direct and indirect relationships among variables in a model which cannot be tested in a direct causal manner. The analysis of correlations among the variables was not intended to prove causation, but to test whether the proposed causal model of pedophilia is consistent with the intercorrelations among the variables.

This analysis was accomplished by calculation of path coefficients. A path coefficient indicates the relationship of an independent variable with a dependent variable. For each independent variable in the model (see Figure 2) there is a path coefficient indicating the amount of expected change in the dependent variable associated with change in the independent variable. Variables in the model are expressed in standardized form (z scores) and at each stage, a variable taken as dependent was regressed on the independent variables in the model upon which the dependent variable was assumed to depend. The calculated standardized regression coefficients (B's) were the path coefficients for the paths leading from the particular set of independent variables to the

dependent variable being considered.

As shown in Figures 2 and 3, two different models were tested.

In model I (Figure 2) the social variables (childhood losses, relationships with father and mother, familial pedophilia) and the biological variables (chromosomal and hormonal irregularities) were treated as "exogenous" variables. Exogenous variables are variables whose variability is assumed to be determined by causes outside of the model (Pedhazur, 1982). The social and biological variables were treated as exogenous because they are assumed to precede the other variables and because they were determined by causes outside of this model (e.g. chromosomal anomalies are present before birth). The curved arrow between the biological and social variables indicates that neither set of variables is presumed to be causely related to the other and therefore their relationship was not analyzed in this model.

The remaining variables in the model were "endogenous". An endogenous variable is one whose variation is hypothesized to be explained by exogenous or endogenous variables in the model. Childhood sexual victimization, for example, is an endogenous variable

because it's variability may be associated with exogenous variables in the model such as having a pedophile relative. Similarly, a man's incestuous involvement with his child is another endogenous variable because it's variability may be associated with another endogenous variable in the model such as his own childhood sexual victimization. Paths, in the form of unidirectional arrows, were drawn from variables taken as antecedents (independent) to the variables taken as consequents (dependent) (Pedhazur, 1982).

In Figure 2, therefore, childhood sexual victimization was related to the social variables. A child might be more vulnerable and receptive to an intimate relationship with an adult if he has experienced the loss of a parent or lack of closeness with a parent or has a pedophile relative as a role model for intimate relationships. This path coefficient was calculted by regressing childhood sex victimization scores on social variable scores.

The psychological variables, feelings of depression, introversion, aggression, morality and violence may be related to a person's biological (chromosomal and hormonal) vulnerabilities and social circumstances (i.e. having experienced childhood losses

and/or distant parents and having a pedophile relative). Further, experiences of childhood sexual victimization might also be related to these feelings. These path coefficients were calculated by regressing MMPI scale scores on biological, social and childhood sex victimization scores respectively.

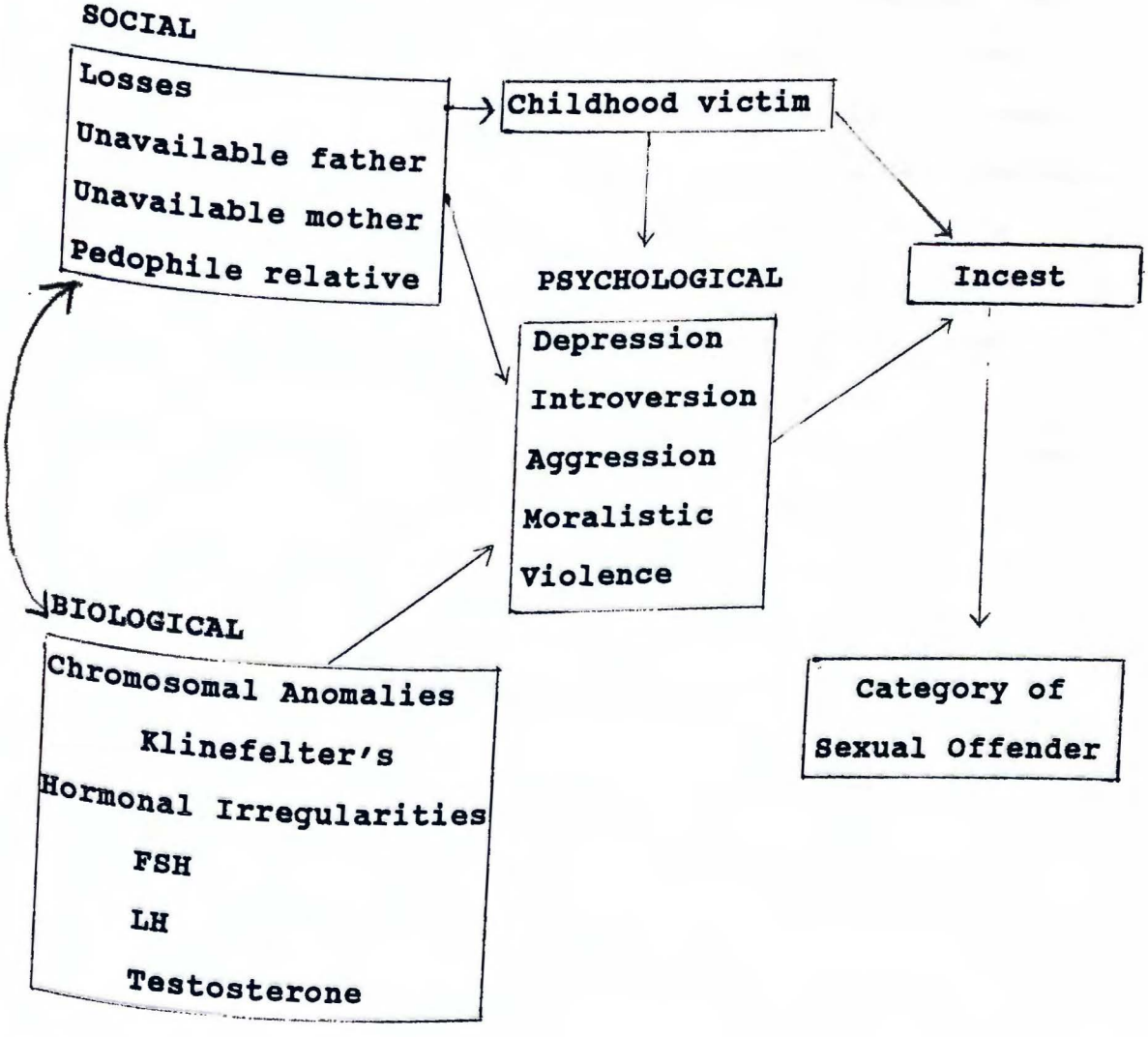
The two alternate paths leading to incest in Model 1 indicate that an adult's incestuous involvement with his child is related to having been sexually victimized as a child himself and indirectly related to his social circumstances. Incestouous involvement is also related to feelings of depression, introversion, aggression, morality and violence (these feelings might make it difficult to establish and maintain adult heterosexual relationships) and indirectly affected by biological vulnerabilites and social circumstances. These path coefficients were calculated by regressing incest scores on childhood sex victimization scores and MMPI scores respectively.

The dependent variable in this study is sexual orientation. Sexual orientation is labeled "Category of Sexual Offender" in Model 1, Figure 2. There are two alternate paths leading to the dependent variable through incest. Sexual orientation is related to incest because a man who chooses to become incestuously

involved with a child probably makes his choice because he has difficulty establishing and maintaining intimate adult relationships. Further, sexual orientation is indirectly related to the two paths described above leading to incest. These path coefficients were calculated by regressing category of sexual offender on incest scores.

Figure 2

Proposed Path Analysis Model I with MMPI Scores



In model II (Figure 3) the social variables (childhood losses, relationships with father and mother, familial pedophilia) and the biological variables (chromosomal and hormonal irregularities) were treated as "exogenous" variables. Exogenous variables are variables whose variability is assumed to be determined by causes outside of the model (Pedhazur, 1982). The social and biological variables were treated as exogenous because they are assumed to precede the other variables and because they are determined by causes outside of this model (e.g. chromosomal anomalies are present before birth). The curved arrow between the biological and social variables indicates that neither set of variables was presumed to be causely related to the other and therefore their relationship was not analyzed in this model.

The remaining variables in the model were "endogenous". An endogenous variable is one whose variation is hypothesized to be explained by exogenous or endogenous variables in the model. Childhood sexual victimization, for example, is an endogenous variable because it's variability may be associated with exogenous variables in the model such as having a pedophile relative. Similarly, a man's incestuous

involvement with his child is another endogenous variable because it's variability may be associated with another endogenous variable in the model such as his own childhood sexual victimization. Paths, in the form of unidirectional arrows, were drawn from variables taken as antecedents (independent) to the variables taken as consequents (dependent) (Pedhazur, 1982).

In Figure 3, therefore, childhood sexual victimization was related to the social variables. A child might be more vulnerable and receptive to an intimate relationship with an adult if he has experienced the loss of a parent or lack of closeness with a parent or has a pedophile relative as a role model for intimate relationships. This path coefficient was calculted by regressing childhood sex victimization scores on social variable scores.

The arrows leading to incest in model II indicate three possible paths. First, incestuous involvement may be directly related to the social variables because having experienced childhood losses, unavailable parent/s and a pedophile relative as a model for intimate relationships may adversely affect a man's ability to establish a healthy relationship with his own children. Second, incest may be directly related

to one's own experience of childhood sexual involvement with a parent as a model of intimacy and indirectly related to his social circumstances. The third path leading to incest indicates that biological vulnerablilties (i.e. chromosomal and hormonal irregularities) might directly relate to incest. There are data suggesting that persons with particular chromosomal and hormonal anomalies are at risk for unconventional sexual behavior (Berlin & Schaerf, 1985). Each path coefficient was calculated by regressing incest on the social variables scores, childhood victim scores and biological lab test scores.

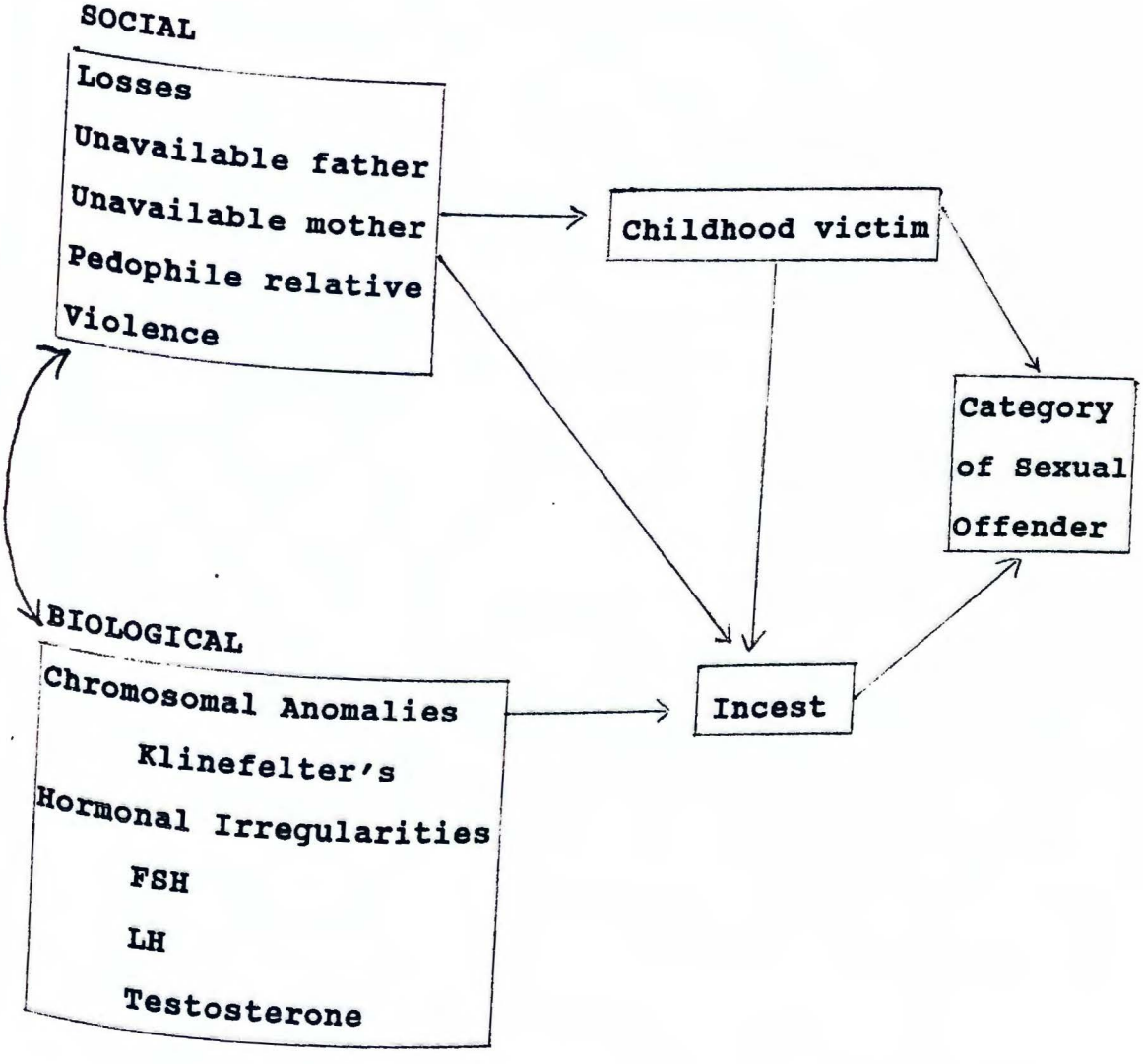
Finally, there are two possible paths leading to the dependent variable, sexual orientation (labeled Category of Sexual Offender). One path indicates that sexual orientation is directly related to a subject's experience of childhood sexual victimization and indirectly related to the social variables. A child who experienced childhood losses, unavailable parent/s and a pedophile relative as a model for intimate relationships might be more vulnerable and receptive to intimate involvement with an adult. An adult who has only experienced intimacy in this kind of unequal relationship might be more likely to have difficulty establishing and maintaining mature heterosexual

relationships. These path coefficients were calculated by regressing sexual orientation on childhood victim scores and regressing childhood victim scores on the social variables scores.

The second path indicates that sexual orientation is directly related to incest and indirectly related to the social variables, childhood victimization and biological irregularities. Sexual orientation is directly related to incest because a man who chooses to become incestuously involved with a child probably makes his choice because he has difficulty establishing and maintaining intimate adult relationships. Further, sexual orientation is indirectly related to the three paths leading to incest as described above. These path coefficients were calculated by regressing category of sexual offender on incest scores, and incest scores on the social variables, childhood victim and biological variables scores.

Figure 3

Proposed Path Analysis Model II without MMPI Scores



Chapter IV

RESULTS

Analyses

To test hypotheses one through ten, the raw data taken from the subjects' charts were examined. Frequency and Pearson χ^2 statistics were computed to determine the number and percentage of subjects from each group which fell into levels of each of the predictor variables. These frequencies, cross tabulations and χ^2s were computed twice: first comparing all six paraphilic groups and second comparing pedophile (homosexual, heterosexual and bisexual pedophiles) and non-pedophile (exhibitionists, sadists, atypical) paraphilic groups.

Second, the six groups of sexual offenders were combined into two categories representing pedophiles and non-pedophiles. The pedophile category was composed of the homosexual pedophiles, heterosexual pedophiles and bisexual pedophile groups. The non-pedophile category was composed of exhibitionists, sadists and the atypical groups. A discriminant analysis was performed using a stepwise selection of the demographic, biological, psychological, and social variables that differentiated between the pedophile and

non-pedophile groups. In the first step of the discriminant analysis the variable (variable one) that contributes most to the discriminatory power of the model as measured by the Wilks' lambda, χ^2 is entered. In subsequent steps, the orthogonal components of each of the other variables' discriminatory power is examined (e.g. variable two with variable one left out). The selection process stops when none of the unselected variables meet the entry criterion. A moderate significance level (.15) was chosen as a criterion to enter the model in an effort to consider the discriminatory power of all of the variables, however small. With the exception of this p=.15 entry criterion, the significance level was restricted to .05 for all other analyses.

Third, a discriminant analysis was performed by a stepwise selection of the demographic, biological, psychological, and social variables that discriminated among the six paraphilic groups. Again, p to enter the model was set at .15 and subsequent analyses restricted to .05 for attaining significance.

To test hypotheses eleven and twelve, two separate path analyses were completed (see Figures 2 and 3). The first path analysis tested Hypothesis eleven, Model I, (Figure 2) and included MMPI scores. The second

path analysis tested Hypothesis twelve, Model II (Figure 3) without the MMPI scores. Variables in the models were expressed in standardized form (z scores) and at each stage path coefficients were calculated by regressing the models' dependent variables on the variables upon which they were assumed to depend.

Demographic Variables

As reported in Table 1, demographic data were collected and coded for all subjects. The demographic variables included: age, birth order, race, marital status, number of children, occupation, referral source, number of arrests, religion and education. Most of these variables were coded categorically and so the frequencies and percentages of subjects within each group falling into each category are presented in Table 1. The means and standard deviations of subjects' ages and education, the only continuous demographic variables, are presented in Table 2.

Table 1

Frequencies and Percentages of Demographic Variables by Sexual Offender Category

Demographic variable	Group: Homosexual Pedophile n=61		Heterosexual Pedophile n=41		Bisexual Pedophile n=10		Total Pedophile n=112		Exhibitionistic n=41		Sadistic n=11		Atypical n=34		Total Non-pedophile n=86		Total n=208	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Birth Order																		
Youngest																		
Middle	27	49	16	39	4	44	46	45	14	34	4	22	8	29	25	30	71	30
Oldest	17	31	14	34	4	44	33	32	16	39	4	22	9	32	27	32	60	26
	11	20	11	27	1	11	23	23	11	27	10	56	11	39	32	38	55	24
Race																		
White																		
Black or other	58	91	35	85	8	80	98	88	35	85	10	91	25	92	82	88	180	86
	6	9	6	15	2	20	14	12	6	15	1	9	2	8	11	12	25	12
Marital Status																		
Single																		
Married	45	70	12	29	8	80	63	56	26	63	11	52	22	65	57	61	120	59
Separated/Divorced	7	11	17	41	1	10	25	22	9	22	5	24	5	15	19	20	44	21
	12	19	2	29	1	10	24	21	6	15	5	24	7	21	17	18	41	20
Children																		
None																		
One	39	74	12	30	8	89	57	57	28	72	14	67	19	63	59	68	116	62
Two or more	7	13	5	13	1	11	13	13	5	13	4	19	4	13	13	15	26	14
	7	13	23	57	0	0	30	30	6	15	3	14	7	23	16	17	46	24
Occupation																		
Works with children	21	34	4	12	1	10	26	23	1	3	1	6	3	10	8	9	34	17
No work with children	37	66	30	88	9	90	84	68	40	97	17	94	26	90	70	80	170	68
Referral																		
Self																		
Court	6	12	9	23	1	10	16	17	2	5	2	13	4	14	8	10	24	14
Other	10	20	10	26	2	20	22	23	10	26	6	40	1	3	16	20	38	21
	33	67	20	51	7	70	58	60	27	69	7	47	24	83	56	69	114	64
Arrests																		
None																		
One or more	11	19	4	10	0	0	15	15	4	10	5	26	10	29	19	21	34	18
	47	81	36	90	8	100	87	85	36	90	14	74	24	71	72	79	159	82
Religion																		
Protestant																		
Catholic	20	33	17	45	5	56	41	39	11	28	7	33	11	38	29	34	70	37
Jewish	20	33	3	8	2	22	24	23	7	18	7	33	5	17	19	22	43	23
Other	2	3	2	5	0	0	4	4	2	5	1	5	0	0	3	3	7	4
	18	30	16	70	2	22	36	33	16	40	6	29	13	44	35	41	60	34

* Percent of each group

$^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$

Table 2

Mean Ages and Years of Education of Sexual Offender Groups

Group	n	[a] Age	[b] Education
Homosexual pedophile	61	35.5 11.6	14.0 4.1
Heterosexual pedophile	41	38.2 13.8	11.6 3.4
Bisexual pedophile	10	37.1 14.5	10.9 2.2
Exhibitionist	41	27.3 6.6	12.5 2.4
Sadists	21	30.3 9.8	12.0 3.2
Atypical paraphiliacs	34	29.8 9.1	12.7 2.5

a mean age is reported on top and standard deviation is below

b years completed

Results of a stepwise discriminant analysis of the demographic variables indicated that, with respect to age, birth order, marital status, number of children, occupation and education, there were significant differences between the pedophiles and non-pedophiles and among the six sexual offender groups. These differences are described below.

Age. Subjects' ages ranged from 21-70. Results of the stepwise discriminant analysis indicated that age was a significant discriminator between the pedophiles and non-pedophiles, $F(1,115)=27.2$, $p<.001$ and among the six paraphilic groups, $F(5,130)=5.99$, $p<.001$. Pedophiles were significantly older ($\bar{x}=36.9$) than the non-pedophiles ($\bar{x}=29.1$). As shown in Table 2 mean ages of group subjects differed. The mean ages of each group were: homosexual pedophiles, 35.5; heterosexual pedophiles, 38.2; bisexual pedophile, 37.1; exhibitionists, 27.3; sadists, 30.3; atypical, 29.8.

Birth order. Birth order was a significant discriminator between the pedophile and non-pedophile groups, $F(1,135)=4.12$, $p<.05$. Birth order was not, however, a significant discriminator among the six paraphilic groups. An examination of associated frequency, crosstabulation and χ^2 suggested that

pedophiles were more likely to be the youngest and non-pedophiles were more likely to be the oldest child in their families of origin, $\chi^2(2, N=192)=6.45, p<.05$ (Appendix E).

Race. This variable was not a significant discriminator between the pedophiles and non-pedophiles or among the paraphilic groups. As shown in Table 1, 184 (87%) of the subjects were white and 27 (13%) of the subjects were black or another race. Each of the paraphilic groups had approximately the same racial composition of 85-95% white subjects and five-15% black or other subjects (Appendix F).

Marital status. Results of the discriminant analysis indicated that this variable was not a significant discriminator between the pedophiles and non-pedophiles. Marital status did discriminate significantly among the six paraphilic groups. Table 1 shows that with the exception of the heterosexual pedophiles, most of the subjects were single (52-80%) or separated/divorced (10-24%). Among the heterosexual pedophiles, 41% were married, 29% were single and 29% were separated/divorced (Appendix G).

Children. Although number of children did not discriminate significantly between the pedophile and non-pedophile groups, it discriminated significantly

among the six paraphilic groups in the stepwise analysis, $F(5,110)=8.92$, $p<.001$. Associated frequency, crosstabulation and χ^2 analysis suggested that with the exception of the heterosexual pedophile group, there were significantly more childless paraphiliacs than there were paraphiliacs with children, $\chi^2(10, N=192)=35.49$, $p<.001$. These results, however, must be interpreted cautiously as there were so few subjects in some of the cells (see Appendix H).

Occupation. Occupation was a significant discriminator between the pedophile and non-pedophile groups, $F(1,115)=5.22$, $p<.05$, and among the six groups, $F(5,130)=4.82$, $p<.001$. Significantly more homosexual pedophiles than other paraphiliacs work with children (e.g coach, teacher), $\chi^2(5, N=174)=31.62$, $p<.001$ (Appendix I).

Referral. Source of referral discriminated between the pedophiles and non-pedophiles, $F(1,115)=5.18$, $p<.05$, and among the six paraphilic groups, $F(5,110)=2.83$, $p<.05$, in the stepwise discriminant analysis. Although the results were not significant, the associated frequency, crosstabulation and χ^2 showed a trend: most of the subjects in all of the groups were referred by the courts (21%) or another source (65%). With the exception of the heterosexual

pedophiles (23%) only 13% of all subjects were self-referred (Appendix J).

Arrests. Number of arrests did not significantly discriminate between the pedophile and non-pedophile groups in the discriminant analysis. Number of arrests also did not significantly discriminate among the six paraphilic groups. As shown in Table 1, 84% of the pedophiles and 79% of the non-pedophiles had been arrested at least once (Appendix K).

Religion. This was not a significant discriminator between the pedophiles and non-pedophiles or among the six paraphilic groups. As shown in Table 1, 37% of the subjects were Protestant, 23% were Catholic, 4% were Jewish and 36% were another religion (Appendix L).

Education. Subjects' education ranged from 3-21 years completed (see Table 2). Results of the discriminant analysis indicated that number of years of completed education discriminated between the pedophiles and non-pedophiles and among the six paraphilic groups, $F(5,110)=3.57$, $p<.01$. There were significantly more pedophiles than non-pedophiles with grade school educations and with graduate school educations. More of the non-pedophiles fell into the high school or college category, $\chi^2(3,N=211)=13.39$, $p<$

.01. More specifically, significantly more of the homosexual pedophiles than other paraphiliacs had college or graduate school educations, while the heterosexual pedophile group had grade school educations, $\chi^2(15, N=211)=35.32$, $p<.01$ (Appendix M).

Results of Analyses of Hypotheses

Biological Hypotheses. The means and standard deviations for the biological variables are reported in Table 3. Subjects' testosterone levels ranged from 95-1659 fd (the normal level for adult males is 575 + or - 150 fd). Subjects' LH levels ranged from 2-111 mlu/ml (the normal level for adult males is 3.9-18 mlu/ml). Subjects' FSH levels ranged from 1-633 mlu/ml (the normal level for adult males is 1.5-16 mlu/ml).

Hypothesis 1: Pedophiles will have a significantly higher incidence of chromosomal anomolies than will other paraphiliacs. This hypothesis was not confirmed by the analysis. Further, only three of the 211 subjects had an XXY karotype with a diagnosis of Klinefelters Syndrome: two were homosexual pedophiles and one was in the atypical group.

Hypothesis 2: Pedophiles will have a significantly higher incidence of hormonal irregularities than will other paraphiliacs. Although there were no significant differences between the pedophiles and non-pedophiles

or among the six paraphilic groups with respect to lutenizing hormone (LH) or follicle stimulating hormone (FSH) levels, all of the paraphilic groups had elevated LH and FSH levels. Testosterone levels were significantly different among the six groups and between the pedophile and non-pedophile groups. Results of a stepwise discriminant analysis of all six groups on all biological variables indicated that testosterone was a significant differentiator among the six diagnostic groups, $F(5,185)=2.47$, $p<.05$. An examination of frequency, crosstabulations and associated χ^2 suggested that the sadist group was significantly below the mean on testosterone levels and the exhibitionist group had significantly elevated testosterone levels, $\chi^2(10,N=211) = 28.74$, $p<.001$. When the combined pedophile group (homosexual, heterosexual, bisexual pedophiles) was compared to the combined non-pedophile group (exhibitionists, sadists, and the atypical group) on testosterone level (below, at, or above mean levels) there were significantly more pedophiles than non-pedophiles in the below-average level and significantly more non-pedophiles than pedophiles in the elevated testosterone level category, $\chi^2(2,N=211) = 6.74$, $p<.05$. These results, however, must be interpreted cautiously as some of the cell

counts were small (see Appendix N).

Table 3

Means and Standard Deviations of Biological Variables by Category of Sexual Offender

Group	n	a Testosterone	b LH	c FSH
Homosexual pedophile	61	635.1	28.4	76.5
		278.8	32.9	165.2
Heterosexual pedophile	41	645.6	23.9	55.3
		250.6	26.1	92.6
Bisexual pedophile	10	754.2	35.0	79.7
		331.2	35.4	109.3
Exhibitionist	41	*800.6	25.1	72.3
		230.7	18.7	96.5
Sadist	21	625.3	19.9	53.2
		252.3	25.9	111.1
Atypical paraphiliacs	34	657.2	23.6	58.2
		225.4	20.6	89.9

Note: means are reported on top and standard deviations are below
a normal level for adult male = 575 + or - 150 (fd)
b normal level for adult male = 3.9-18 mlu/ml
c normal level for adult male = 1.5-16 mlu/ml
*p<.05

Psychological Hypotheses.

Hypothesis 3: Pedophiles will have significantly higher scores on the Social Introversion, Psychopathic Deviate, Dominance, Depression and Psyasthenia scales of the MMPI than will other paraphiliacs. Only 14 of the 211 subjects had MMPI scores recorded. Results of the discriminant analysis indicated that there were no significant differences between the pedophile and non-pedophile groups or among the six paraphilic groups on their MMPI scale scores. It should be noted, however, that this analysis is suspect because of the small number of subjects included in this analysis (Appendix O).

Social Hypotheses. The results of the analysis of the social hypotheses (Hypotheses 4-10) are presented in Table 4. These results are reported as frequencies and percentages of subjects within each group falling into different levels of the coded categorical social variables.

Table 4.

Frequencies and Percentages of Social Variables by Category of Sexual Offender

Social Variable	Group: Homosexual Pedophile n=61		Heterosexual Pedophile n=41		Bisexual Pedophile n=10		Total Pedophile n=112		Exhibitionist n=41		Sadist n=21		Atypical n=34		Total Non-pedophile n=96		Total n=208	
	n	%[a]	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Familial Pedophilia																		
No pedophile relative	43	90	30	79	6	83	76	71	31	82	17	90	26	93	71	76	147	74
Maybe	2	4	0	0	0	0	2	2	1	3	0	0	1	3	2	2	4	2
Pedophile relative	3	6	8	21	1	14	12	11	6	17	2	11	1	3	8	9	20	10
Relationship with Father																		
Positive	15	28	7	17	2	25	23	22	10	26	3	17	1	3	14	15	37	19
Somewhat negative	16	30	9	22	0	0	25	23	9	23	4	22	8	28	20	22	45	23
Negative	22	42	24	60	6	75	50	47	20	51	11	61	20	69	51	56	101	51
Relationship with Mother																		
Positive	22	59	17	50	2	29	39	44	10	31	4	27	12	50	25	29	64	37
Somewhat negative	8	22	7	21	2	29	17	19	14	44	6	40	6	25	26	31	43	25
Negative	7	19	10	29	3	43	19	21	8	25	5	33	6	25	19	22	38	22
Childhood Loss																		
No loss	35	*67	20	50	1	10	55	51	21	53	9	56	18	55	47	52	102	52
Loss	17	33	20	50	9	*90	45	42	19	47	7	44	15	45	39	43	84	42
Number of Childhood Sexual Experiences with Adults																		
None	36	67	28	72	3	43	65	61	25	71	15	79	23	85	60	67	125	64
A few	12	22	8	21	1	14	21	20	6	17	2	11	3	11	11	12	32	16
Many	6	11	3	7	3	43	11	10	4	11	2	11	1	4	7	8	18	9
Violence																		
Violent	1	2	5	12	0	0	6	6	1	3	19	***90	7	22	25	28	31	16
Not violent	56	98	36	88	10	100	59	***94	38	97	2	10	25	78	64	72	163	84
Incestuous with Child																		
No	61	95	29	71	10	100	97	87	40	98	21	100	34	100	92	99	189	92
Yes	3	5	12	*29	0	0	15	*14	1	2	0	0	0	0	1	1	16	8

[a] Percent of each group

* $p<.05$ ** $p<.01$ *** $p<.001$

Hypothesis 4: Pedophiles will have a significantly higher incidence of familial pedophilia than will other paraphiliacs. A stepwise discriminant analysis indicated that there were no significant differences between the pedophile and non-pedophile groups on incidence of familial pedophilia. There were also no significant differences among the six paraphilic groups (Appendix P).

Hypothesis 5: Pedophiles will have a significantly higher incidence of father absence and/or emotional distance during childhood than will other paraphiliacs. There were no significant differences between the pedophiles and non-pedophiles or among the six paraphilic groups on their self reports of childhood relationships with their fathers. As reported in Table 4, 3-28% of the subjects in all of the six paraphilic groups reported positive relationships with their fathers and 62-97% of all of the subjects reported somewhat negative or negative childhood relationships with fathers (Appendix Q).

Hypothesis 6: Pedophiles will have a significantly higher incidence of mother absence or emotional distance during childhood than will other paraphiliacs. A post-hoc analysis of paraphilic subjects' relationships with their mothers was also done. This

was measured in the same way as hypothesis 5, relationship with father. The analysis did not yield significant differences between the pedophiles and non-pedophiles or among the six paraphilic groups. As shown in Table 4, 27-59% of all subjects reported positive relationships with their mothers while 31-73% of the subjects reported somewhat negative or negative childhood relationships with mothers (Appendix R).

Hypothesis 7: Pedophiles will have a significantly higher incidence of losses during childhood than will other paraphiliacs. Although there were no significant differences between the pedophile and non-pedophile groups on this variable, there were significant differences among the six paraphilic groups, $F(5,165) = 2.52$, $p<.05$. The homosexual pedophile group had a significantly lower incidence of losses during childhood than the other groups and the bisexual pedophiles had a significantly higher incidence of losses during childhood than the other groups, χ^2 $(5,N=191) = 11.83$, $p<.05$ (Appendix S).

Hypothesis 8: Pedophiles will have a significantly higher incidence of childhood sexual victimization than will other paraphiliacs. There were no significant differences between the pedophile and non-pedophile groups or among the six paraphilic groups on this

variable. Only 46 of the 211 subjects had a clear history of childhood sexual involvement with an adult (see Appendix T). Based upon this limited sample, significantly more of the homosexual pedophiles than other paraphilics had been sexually involved with an adult before age 14, $\chi^2(50, n=46) = 68.49$, $p<.05$. These results, however, must be interpreted cautiously due to small sample size.

Hypothesis 9: Pedophiles will have a significantly lower incidence of use of violence than will other paraphiliacs. Results of the discriminant analysis indicated that there were significant differences between the pedophile and non-pedophile groups, $F(1,120) = 12.59$, $p<.001$, and among the six paraphilic groups, $F(5,20) = 4.58$, $p<.01$, on the use of violence. As predicted, the pedophiles had a significantly lower incidence of the use of violence than did the other paraphilics, $\chi^2(1, N=200) = 20.41$, $p<.001$. When all six groups were compared on this variable the sexual sadist group had a significantly higher incidence of use of violence than did each of the other groups, $\chi^2(5, N=200) = 101.10$, $p<.001$ (Appendix U).

Hypothesis 10: Pedophiles will have a significantly higher incidence of incestuous involvement with their children than will other

paraphiliacs. A post-hoc analysis of the incidence of subjects' incestuous involvement with their children was conducted. This analysis indicated that there were significant differences between the pedophiles and non-pedophiles and among the six paraphilic groups on this variable. The pedophile group was significantly more incestuous than the non-pedophile group, $F(1,25)=4.26$, $p<.05$. An evaluation of associated frequency, crosstabulations and χ^2 indicated that this was because the heterosexual pedophiles were significantly more involved in incestuous relationships with their children than were each of the other groups, $\chi^2(5,N=211) = 35.16$, $p<.001$. These results, however, must be interpreted cautiously because of the small number of subjects in some of the cells (see Appendix V).

Path Model. Two alternate path models (Hypotheses 11 and 12) were tested (see Figures 2 and 3). The first model included MMPI scores and the second one did not.

Hypothesis 11: (Figure 2) Biological vulnerabilities and social circumstances (i.e. childhood experiences of loss, unavailable parents, and having a pedophile relative) are associated with feelings of depression, introversion, aggression and

morality. Further, childhood experiences of loss, unavailable parents and having a pedophile relative precede a child's vulnerability to becoming intimately involved with an adult, which in turn affects feelings of depression, introversion, aggression and morality. An adult's incestuous involvement with his child is directly related to having been sexually victimized as a child himself and indirectly affected by his social circumstances. Incestuous involvement is also directly related to feelings of depression, introversion, aggression, morality and violence (these feelings might make it difficult to establish and maintain adult heterosexual relationships) and indirectly affected by biological vulnerabilites and social circumstances. Sexual orientation is directly related to incest because a man who chooses to become incestuously involved with a child probably makes his choice because he has difficulty establishing and maintaining intimate adult relationships. An attempt was made to test this model but there were not enough MMPI data for the model cells to compute the estimates of the paths (see Appendix W). Therefore this hypothesis could not be evaluated directly.

Hypothesis 12: (Figure 3) Childhood experiences of loss, unavailable parents and having a pedophile

relative affect a child's vulnerability and receptivity to becoming intimately involved with an adult. An adult's incestuous incolvement with his child is directly related to having been sexually victimized as a child himself and indirectly affected by his social circumstances (i.e. childhood experiences of loss, unavailable parents and having a pedophile relative). Unconventional sexual behavior (eg. incest) is also moderated by biological vulnerabilities (i.e. chromosomal and hormonal irregularities). Sexual orientation is directly related to incest because a man who chooses to become incestuously involved with a child probably makes his choice because he has difficulty establishing and maintaining intimate adult relationships. Further, a child who experienced childhood losses, unavailable parent/s and a pedophile relative as a model for intimate relationships might be more vulnerable and receptive to intimate involvement with an adult. An adult who has only experienced intimacy in this kind of unequal relationship might be more likely to have difficulty establishing and maintaining mature heterosexual relationships.

Results of the path analysis indicated that two path coefficients were significant (see Figures 4 and 5): (a) a child's collective social circumstances (i.e.

having experienced losses, relationship with parents, and having a pedophile relative), and especially having a pedophile relative, are related to childhood sexual involvement with an adult, $F(4,118)=6.54$, $p<.001$; (b) incestuous involvement with a child is related to sexual orientation, $F(1,203) = 11.19$, $p<.001$ (Appendix X).

Figure 4

Path Model Correlations

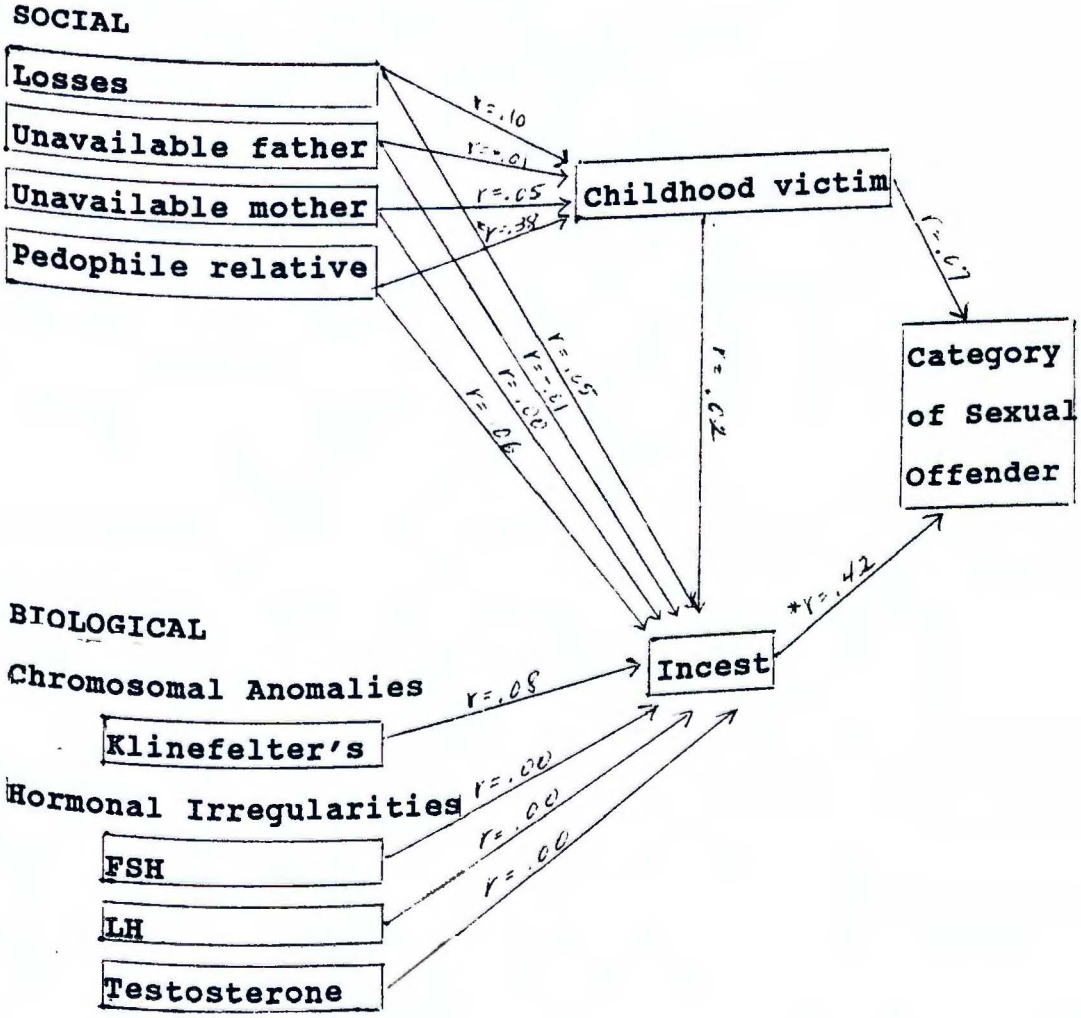
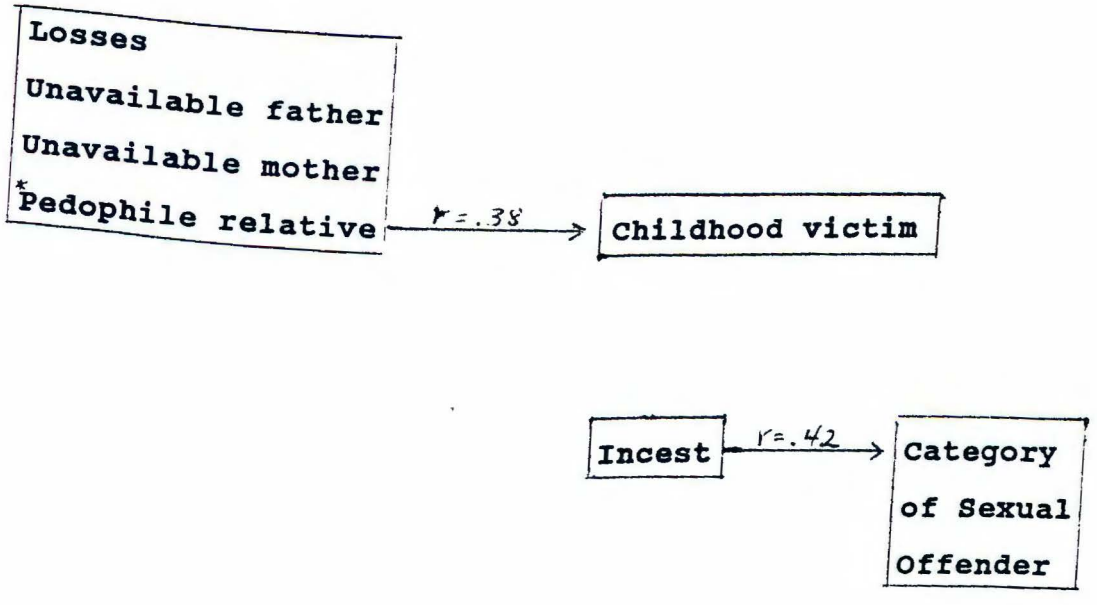


Figure 5

Significant Path Model Correlations



Summary

There were significant differences between the major groupings of pedophiles (homosexual, heterosexual and bisexual pedophiles) and non-pedophiles (exhibitionists, sadists and the atypical group). The results of a stepwise discriminant analysis indicated that these major groupings differed demographically, biologically, and socially. There were also significant differences when the two major groupings were categorized and analyzed as six different paraphilic diagnostic groups (homosexual pedophiles, heterosexual pedophiles, bisexual pedophiles, exhibitionists, sadists, atypical paraphiliacs). Demographically, the diagnostic groups differed with respect to age, birth order, marital status, number of children, occupation and education. The groups did not differ on race, marital status, source of referral, arrest record or religion.

A significant biological variable that discriminated between the pedophile and non-pedophile groups and among the six different diagnostic groups was testosterone level. The groups did not differ on chromosomal anomolies or LH and FSH levels. Psychological variables were assessed by recording MMPI scale scores. There were no significant differences

between the pedophile and non-pedophile groups and among the six paraphilic groups on their MMPI scores. Because only 14 of the 211 subjects had been given the MMPI and some of the subjects' scale scores were extremely skewed (t scores in the 80's and 90's), results of the psychological variables must be interpreted cautiously. Significant discriminating social variables included experience of childhood loss, age of first sexual involvement, use of violence, and incestuous involvement. The groups did not differ in incidence of familial pedophilia and relationship with parents.

The discriminant and path analyses were conducted first with, and second without, the MMPI scores as only 14 subjects had been given the MMPI. Results of the the second path analysis (Model II without the MMPI scores) indicated that two path coefficients were significant: (a) a child's collective social circumstances (i.e. having experienced losses, relationship with parents, and having a pedophile relative), and especially having a pedophile relative, are related to childhood sexual involvement with an adult, $F(4,118)=6.54$, $p<.001$ (b) incestuous involvement with a child is related to sexual orientation, $F(1,203) = 11.19$, $p<.001$.

Table 5

Summary of Significant Differences between Pedophiles and Non-pedophiles

Group	
Pedophiles	Non-pedophiles
older	younger
youngest child	oldest child
works with children	works with adults
grade/graduate school education	high school/college
	high testosterone
not violent	violent
incestuous	not incestuous

Table 6
Summary of Significant Differences among six Paraphilic Groups

Group					
Homosexual Pedophile	Heterosexual Pedophile	Bisexual Pedophile	Exhibi- tionist	Sadist	Atypical
	oldest		youngest		
	married and have children				
work with children					
educated	uneducated				
			elevated testosterone	low	
few child-hood losses		many child-hood losses			
childhood sex victims		childhood sex victims			
				violent	
	incestuous				

Chapter V

DISCUSSION

A stepwise discriminant analysis was used to describe the biological, psychological, and social differences between pedophiles and non-pedophiles. This analysis also differentiated six paraphilic groups (homosexual pedophiles, heterosexual pedophiles, bisexual pedophiles, exhibitionists, sadists, atypical paraphilics) on variables extracted from charts.

Results from a path analysis were used to test hypotheses about patterns of correlations among the biological, psychological and social variables.

Summary of Results

Tables 5 and 6 summarize the significant results of this study. As shown in Table 5, demographically, pedophiles were older, were youngest children in their families of origin, worked with children, and had completed grade school or graduate school. Non-pedophiles were younger, were oldest children in their families of origin, worked with adults, and had completed high school or college. Biologically, pedophiles had below average testosterone levels and non-pedophiles had elevated testosterone levels.

Socially, pedophiles were less violent and significantly more likely to be involved in incestuous relationships with their children than were non-pedophiles.

As shown in Table 6, demographically, heterosexual pedophiles were the oldest (mean age = 38) and exhibitionists were the youngest (mean age = 27) of the paraphilic groups. With the exception of heterosexual pedophiles, most paraphilics were single and did not have children. More homosexual pedophiles than other paraphilics worked with children. Homosexual pedophiles were more educated and heterosexual pedophiles were less educated than were other sexual offenders. When six paraphilic groups were compared biologically, sadists had below average testosterone levels and exhibitionists had elevated testosterone levels. Socially, homosexual pedophiles were significantly less likely to have experienced a childhood loss of a parent/s while bisexual pedophiles were significantly more likely to have experienced a childhood loss than other paraphilic groups. Homosexual pedophiles, when compared to other paraphilics, were significantly more likely to have been sexually victimized as children. Sadists were more violent and heterosexual pedophiles were more

involved in incestuous relationships with their children than were other paraphilic groups.

Relationship of Present Findings to The Literature on Pedophilia

Demographics. As in earlier research (Danna, 1984) which found that pedophiles represent a wide age range (from 18-61), ages of subjects in this study ranged from 21-70. Further, among the Johns Hopkins sample, pedophiles were older ($\bar{x}$=36.9) than non-pedophiles ($\bar{x}$=29.1).

Results of this study suggest that pedophiles were significantly more likely to be the youngest and non-pedophiles were significantly more likely to be the oldest child in their families of origin. There were no other studies that have explored the birth order variable.

184 of the subjects in this study were white and 27 were black or another race. In the only other study (Danna, 1984) that investigated race, a similar racial composition existed, with 42 whites and two blacks.

Danna (1984) also found that homosexual pedophiles were usually single. Results of this study supported Danna's earlier findings that homosexual pedophiles were generally single. Further, homosexual pedophiles were significantly more likely to have no children than

heterosexual pedophiles who were significantly more likely to be married and/or separated/divorced and have children.

Results of this study confirmed Danna's (1984) findings that pedophiles are represented in a wide range of occupations, from unskilled laborers to professionals. Occupations of subjects in this study included manual laborers, inmates, clerical workers, priests, coaches, psychologists, psychiatrists, professors and pediatricians. This wide range of occupational skill levels may help to explain the finding (Gebhard, 1964) that pedophiles were uneducated and simple-minded, which appears to conflict with Danna who found that many pedophiles were professionals. An additional finding in this study was that homosexual pedophiles were significantly more likely to work with children (e.g. coach, priest, pediatrician) than were other paraphilics.

There are no data describing sources of referral to treatment clinics. The paraphiliac subjects in this study were generally not self-referred. Most were referred by the courts, attorneys, probation officers, therapists or family members.

Fitch (1962) did not differentiate paraphilic groups but found that pedophiles had a higher

recidivism rate than did comparable heterosexual offenders. Results of this study did not support Fitch's findings. Pedophiles were no more likely to have an arrest record than were non-pedophiles. An inspection of Table 1, however, shows that most subjects in all of the paraphilic groups in this study did have arrest records.

A limitation in this study was the lack of a non-paraphilic comparison group. If such a comparison group had been included, recidivism rates might have been an important discriminator between the normal and paraphilic groups. As noted in the researcher's journal observations, most of the pedophile subjects had life-long patterns of preoccupation with and imagery involving children.

Results of previous research on pedophiles' education are incongruent. Wilson, et al. described a group of politically active European pedophiles -at-large as educated whereas Gebhard (1964) described an American pedophile sample as uneducated. This study supported both of these findings: homosexual pedophiles were the most educated (mean years of education=14) and bisexual and heterosexual pedophiles were the least educated (mean years of education=11.2) of the six paraphilic groups in this study.

There are no previous data on paraphilic subjects' religion. In this study, while there were no significant differences between the pedophiles and the non-pedophiles or among the six paraphilic groups, most of the subjects had some religious affiliation (Table 1). About one-third were Protestant (38%) and a large group was Catholic (about 23%) but only 4% were Jewish. The remaining subjects affiliated with other religions (e.g. Hindu, other).

Biological. Unlike previous findings at Johns Hopkins Sexual Disorders Clinic (Gaffney & Berlin, 1984), in which chromosomal anomalies were found in a number of 18 homosexual pedophiles, only three of the 211 subjects in the current study (two of the 61 homosexual pedophiles and one of the 34 atypical paraphilics) had Klinefelters Syndrome.

Gaffney & Berlin (1984) also found that pedophiles have a marked LH elevation and hormonal irregularities when compared to non-pedophile patients and normal male controls. As shown in Table 3, all six groups of paraphilic subjects in the present study had elevated LH and FSH levels. As shown in Tables 5 and 6, testosterone was the only biological variable that discriminated between the pedophiles and non-pedophiles of this study. Significantly more of the pedophiles

than non-pedophiles had below-average testosterone levels. A more detailed analysis revealed that the sadists had below-average testosterone levels and the exhibitionists had elevated testosterone levels.

Psychological. The MMPI has been widely used to study sexually deviant criminal offenses. With the exception of an elevated Psychopathic deviate (Pd) scale, results of these studies have been inconsistent (Rader, 1977; Karacen, 1974; Panton, 1958; Rada, 1978; Schmidt, 1945; Swenson & Grimes, 1958; Armentrout & Hanes, 1978; Anderson & Kunce, 1979).

Rader (1977) for example, found that rapists scored significantly higher than exhibitionists on the F, Hs, D, Hy, Pd and Sc scales whereas Karacen, Williams, Guerrero, Salis, Thornby & Hursch (1974) found that 12 rapists scored significantly higher than 12 prison controls and 12 normal controls on the Pd, Ma, and D scales. Panton (1958) and Rada (1978) on the other hand, did not find significant differences on the MMPI between rapists and various control groups. Schmidt (1945), who did not differentiate among sexual offenders, found elevated Mf, Pa, Sc scales for all offender subjects. Swenson and Grimes (1958) found an elevated Pd scale among 45 undifferentiated sexual offenders. Armentrout and Hauer (1978) found an

elevated Pd scale among the rapist and nonrapist sexual offender groups studied. Anderson and Kunce (1979) analyzed MMPI profiles of 92 sex offenders who had been institutionalized for psychiatric evaluation. These researchers found that 88 of the subjects could be categorized into one of three profiles: F,Sc; Pd, Ma; or D, Pd.

This lack of consistency among studies does not indicate that differences do not exist among the paraphilias. Rather, most of the MMPI research on sexual offenders has not been comparable because of different control groups, biased samples, contamination of experimental groups and general treatment of all of the paraphilias as a single group. Although this study attempted to control some of the aforementioned limitations, only 14 of the 211 subjects had MMPI scores recorded. Results of the discriminant analysis, should be interpreted very cautiously because of small sample size. No significant differences were found between the pedophile and non-pedophile groups or among the six paraphilic groups on their MMPI scale scores (Appendix O). A characterization of sexual offenders based upon the MMPI is not possible from the present data.

Social. Unlike the Gaffney, Lurie & Berlin's

study (1984), in which there was a significantly higher incidence of pedophile relatives in a pedophile group than in a depressed inpatient group, the present study found no significant differences between pedophiles and other paraphilics in incidence of familial pedophilia. Homosexual pedophiles in the current study were significantly more likely than other paraphilics to have been sexually victimized as children. It is not clear, however, that this victimization was incestuous. The absence of a non-paraphilic male comparison group, such as was used by Gaffney, Lurie & Berlin, may help to explain the seemingly incongruent findings between this study and previous research.

No significant differences were found in the present study between the pedophiles and non-pedophiles or among the six paraphilic groups with respect to positive-negative relationships with fathers. An inspection of Table 4, however, suggests that there were no differences among the six paraphilic groups on father-son relationships because most subjects in all of the six paraphilic groups reported negative relationships with their fathers. If a non-paraphilic comparison group had been used in this study, father-son relationship might have been an important discriminator between the non-paraphilic and paraphilic

groups. This omission may help to explain the inconsistent findings in the literature to date: significantly more homosexuals than heterosexuals, heterosexual pedophiles and homosexual pedophiles report poor father-son relationships (Freund & Blanchard, 1983); pedophiles have distant fathers (Mohr, 1982; Freund, 1982); pedophiles perceive their fathers more negatively and their mothers more positively than do rapists or nonoffenders (Roby, 1982).

Results of the current study also indicated that there were no significant differences between the pedophiles and non-pedophiles or among the six paraphilic groups with respect to positive-negative relationships with mothers. An inspection of Table 4, however, suggests that nearly twice as many of all of the paraphilic subjects reported positive mother-son relationships as reported positive father-son relationships. Further, nearly twice as many subjects in all of the groups in the present study reported negative father-son relationships as reported negative mother-son relationships. Although the groups did not differ significantly from one another, there appears to be a pattern of negative father-son relationships and positive mother-son relationships among the paraphilic

subjects. These tentative findings could be seen as support for psychoanalytic interpretations of pedophilia. Psychoanalytic theory views a boy's feelings toward his mother and his resolution of the Oedipus complex through identification with his father as a critical determinant of adult relations and attitudes toward mature heterosexual relationships. Because these paraphilic subjects had positive relationships with their mothers and negative relationships with their fathers, satisfactory resolution of the Oedipal conflict, according to psychoanalytic theory, would not have occurred. These subjects would have been unprepared to enter into mature heterosexual relationships.

Although there are no studies that investigate childhood losses with a paraphilic population, Myers & Berah (1983) found that a court-referred pedophile group came from less stable families than an exhibitionist group. In contrast, results of the present study indicated that there were no differences between pedophiles and non-pedophiles in experience of childhood loss of parent/s. However, homosexual pedophiles experienced significantly fewer childhood parental losses (33%) and bisexual pedophiles had significantly more losses (90%) than the other

paraphilic groups (table 4). About one-half of the subjects in the other paraphilic groups had experienced a childhood loss of a parent figure through death, separation or divorce.

Gebhard (1975) and Danna (1984) found that pedophiles were often sexually abused as children. Results of this study supported these findings: homosexual pedophiles were significantly more likely to have been childhood sexual victims than the other paraphilic groups (Table 4).

Results of the present research indicated that subjects in the pedophile group were significantly more likely to be incestuously involved with their children than subjects in the non-pedophile group. An examination of Table 4, however, suggests that this difference can be attributed almost exclusively to the heterosexual pedophile group who had more opportunities for incest. 70% of the heterosexual pedophiles had children while only 11-40% of the other paraphilic subjects had children (Table 1). Further, and in contrast to Bandura's Social Learning Theory (which suggests that childhood sexual experiences with adults could be models for intimacy), there appeared to be no connection between childhood sexual victimization and incest in this study. The homosexual pedophiles were

significantly more likely to have been sexually victimized as children than the heterosexual pedophiles whereas the heterosexual pedophiles were significantly more likely to be incestuously involved with their own children.

Some studies suggest that pedophiles are more passive and submissive than rapists (Peters, 1976); have higher needs to nurture than normal adult males (Fisher & Howell, 1970); are usually non-violent and act as a child's friend (Danna, 1984). Results of the present study supported these findings. Pedophiles were significantly less violent and sadists were significantly more violent than other paraphilic groups.

Path Models

The two path models (Figures 2 and 3) tested were an effort to understand the relationships among the biological, psychological and social background variables investigated in this study. Model I, which included MMPI scores, could not be tested because only 14 of the 211 subjects had been given the MMPI. There were not enough MMPI data for the model cells to compute the estimates of the paths (see Appendix W). The results of the path analysis of Model II (Figures 4 and 5), which did not include the MMPI scores, indicate

that two path coefficients were significant: (a) a child's collective social circumstances (i.e. having experienced parental losses during childhood, relationship with parents, and having a pedophile relative), and especially having a pedophile relative, were related to childhood sexual involvement with an adult, $F(4,118)=6.54$, $p<.001$, and (b) incestuous involvement with a child was related to sexual orientation, $F(1,203)=11.19$, $p<.001$.

These results suggest, as hypothesized, that childhood experiences of loss, unavailable parents and having a pedophile relative are related to a child's vulnerability and receptivity to becoming intimately involved with an adult. The strongest relationship is the one between having a pedophile relative and childhood sexual involvement with an adult ($r=.38$).

There was no significant relationship, as hypothesized, between a man's incestuous involvement with his children and his own childhood sexual victimization. Nor was there a significant relationship between his childhood social environment and incest. Further, there was no significant relationship between biological vulnerabilities and incest.

There was a significant correlation between incest

and sexual orientation (r=.42). As hypothesized, sexual orientation was related to incest because a man who chooses to become incestuously involved with a child probably makes his choice because he has difficulty establishing and maintaining intimate adult relationships.

Limitations and Future Research

Future research with sexual offenders could be improved by controlling rater bias, sample bias (as much as possible), including non-paraphilic heterosexual and homosexual male comparison groups, and collecting and integrating psychological test results with other data. It is unfortunate that so few of the patients at the Johns Hopkins Sexual Disorders Clinic actually completed the MMPI. Additional areas for future research are provided by informal observations recorded while reading through the subjects' charts.

The researcher was one of the raters. Some steps were taken to minimize rater bias in this study (e.g. the second rater was unfamiliar with the hypotheses, charts were rated in alphabetical order rather than by diagnostic group category, biological and psychological data were objective). Future research, however, could eliminate this experimenter bias by using independent raters who are unfamiliar with the

study's hypotheses.

The sample used in this study was selective. Subjects were hospital inpatients. It is difficult, however, to control sample bias while studying groups that are not readily available in the general population. Sample bias, however, can be minimized by using an outpatient or non-patient sample. Each of these alternatives involves trade-offs. An outpatient sample may not have as much data collected on it as an inpatient sample (e.g. lab test results might not be available for an outpatient sample). Thus the findings of this study cannot be safely generalized beyond a hospitalized sample. Working with non-patient, uninstitutionalized paraphilics involves ethical and legal constraints for the researcher that may preclude in-depth data collection (e.g a pedophile is unlikely to participate in a study in which the researcher cannot guarantee him confidentiality or anonymity).

A second shortcoming of the present study was the lack of a non-paraphilic heterosexual and homosexual male comparison group. Although one of the goals of this study was to understand differences among groups of sexual offenders, future research in this area could be enhanced by an understanding of how sexual offenders are different from a non-paraphilic population. For

example, most of the paraphilic subjects in this study reported negative childhood relationships with their fathers. Had a non-paraphilic comparison group been used in this study, possible differences in the pattern of child-parent relationships between paraphilics and non-paraphilics might have identified an important predisoposing variable in pedophilia. The inclusion of a heterosexual male comparison group might help to clarify the role that father's play in the development of a pedophilic sexual orientation.

Other Observations. While reading through subjects' charts, the researcher kept an informal journal of observations. Observations were recorded when they were repeated across multiple charts. They were not tested but they are noted briefly here because they may stimulate future research.

1. Many of the subjects were alcoholics and/or had alcoholism in their families.

2. Some of the subjects had histories of head trauma.

3. Many of the subjects had an additional diagnosis of Adjustment Disorder.

4. Pedophile "victims" usually knew the offender prior to their victimization.

5. Most of the subjects were sexually active with

peers at ages 10-14 or younger. They learned about sex from peers. They often did not have basic or accurate information about anatomy and sex.

6. Many of them had difficulty or failure establishing adult, heterosexual relationships but described the earlier (age 10-14) peer relationships as positive.

7. Many of the subjects did not have other, more appropriate sexual outlets.

8. Pedophiles often had a life-long (since puberty) pattern of preoccupation with and imagery involving children.

9. Exhibitionists often had unsatisfactory sex-lives outside of their exhibitionism. They seem to use their exhibitionist behavior as a passive and inappropriate invitation for sex. One exhibitionist said that he was "hoping someone would respond and get in the car with him and have sex". Another commented about his exhibitionism that "you can avoid the rigamarole of dating and caring - it's like going to a bar and picking up a woman for the evening".

10. Isolated sexual encounters with children sometimes occur because of schizophrenia, mental retardation, drunkenness, organic mental disorders or an emotional crisis. These isolated acts are generally

not considered pedophilia.

Theoretical and Practical Implications

The purpose of this study was to explore the biological, psychological, and social variables that may predispose men to a pedophiliac sexual orientation. There are implications for theory, research, and practice.

Theory. The results of this study both support and refute some of the theoretical explanations of deviant sexuality. These theories include Social Learning and Behavioral explanations of paraphilia, biological abnormalities, Separation-individuation anxiety, and Psychoanalytic concepts of arrested psychosexual development.

Bandura's Social Learning Theory describes learning as occuring in part through obvservation and modeling. Similarly, Behavioral Theory explanations of pedophilia assume that pedophilia is a learned behavior. Hypotheses 4, 8 and 9 in this study (Do pedophiles have a higher incidence of familial pedophilia, childhood sexual victimization, and incestuous involvement with their children than other paraphiliacs?) addressed the Learning theories assumption that pedophilia is a learned behavior.

Do pedophiles have a higher incidence of familial

pedophilia than other paraphiliacs? If a man had observed a pedophile relative as a role model for intimacy during his childhood that man might imitate the pedophile behavior during his adulthood. Is pedophile behavior learned? Results of this study do not support these theoretical explanations of pedophilia. Very few of the paraphilic subjects (including the pedophiles) had a pedophile relative (Appendix P) from whom they might have learned their sexual behavior or who might have served as a role model.

Do pedophiles have a higher incidence of childhood sexual victimization than other paraphilics? If so, do pedophiles' childhood sexual experiences with adults serve as learning models for adulthood intimacy with children? Results of this study tentatively support this Learning Theory explanation of pedophilia. Although there were no significant differences between the pedophile and non-pedophile groups with respect to incidence of childhood sexual victimization, an examination of Table 4 indicates that 30% of the pedophiles and 20% of the non-pedophiles reported being sexually victimized as children. 33% of the homosexual pedophiles, 28% of the heterosexual pedophiles and 57% of the bisexual pedophiles (which represents only four

bisexual pedophile subjects) had been childhood sexual victims. It is estimated that 5-28% of the non-paraphilic population has been sexually victimized as children (Kinney, Pomeroy, Martin & Gebhard, 1953; Gagnon, 1965; Summit & Kryson, 1978).

Further, results of the path analysis suggest that there is a correlation (r=.38) between childhood sexual victimization and having a pedophile relative. It is not clear whether pedophiles were childhood victims of their pedophile relatives or whether observation of a pedophile relative reinforced the adult-child model of intimacy that may have been learned from their own childhood sexual experiences with adults.

The data from this study on incidence of childhood sexual victimization among paraphilics also supports the actual sexual experience variation of psychoanalytic theory. Problems resulting from actual childhood sexual experiences, which Freud and many of his followers attributed to Oedipal fantasies, may not be manifested during early life, according to this variation of psychoanalytic theory. Such problems may surface later when the demands of adult sexuality overwhelm the individual. Proponents of the actual sexual experience alternative to Freud's theory maintain that the adult with this background would show

strong narcissism, needing continual recognition and appreciation. In the absence of such support, individuals who had sexual experiences in childhood feel inadequate and inferior as adults and seek relationships in which they can overwhelm and conquer others (Kaplan & Sadock, 1985).

Do pedophiles have a higher incidence of incestuous involvement with their children than other paraphilics? If so, is this related to his own childhood sexual victimization? Results of this study do not suggest that incestuous behavior is learned. The bisexual pedophiles and homosexual pedophiles were significantly more likely to have been sexually victimized as children than the heterosexual pedophiles. Yet the heterosexual pedophiles were significantly more likely than the homosexual and bisexual pedophiles to be involved in an incestuous relationship with their children. Finally, the path analysis indicates that there is almost no correlation ($r=.02$) between childhood sexual victimization and incest.

Behavioral explanations of pedophilia assume that it is a learned behavior that should be addressed through a sexual reorientation process. In addition to formally tested hypotheses in this study, there are

also informal observations to both support and refute Learning theory explanations of pedophilia. In support of a learning theory explanation is the researcher's journal observation that many of the paraphilics learned (or mislearned) about sex from peers and often did not have accurate information about anatomy or sex. Alternatively, a perusal of the subjects' arrest frequencies (Table 3) suggests that recidivism rates are high among this population and therefore a "re-learning" of appropriate sexual behavior is not happening. Further, the observation that pedophiles have life-long preoccupations with children suggests that their sexual orientation is a complex combination of personality traits, constitutional factors and life experiences.

Biological theories suggest that chromosomal, hormonal, and other physiological factors may influence sexual behavior. Hypotheses 1 and 2 in this study (Do pedophiles have a higher incidence of chromosomal and hormonal irregularities than other paraphilics?) address these biological theories.

Do pedophiles have a higher incidence of chromosomal anomalies than other paraphilics? Results of this study do not support this theoretical (chromosomal) explanation of pedophilia: only three of

the 211 subjects in all of the groups (two homosexual pedophiles and one atypical paraphilic) had an XXY karotype with a diagnosis of Klinefelter's Syndrome.

Do pedophiles have a higher incidence of hormonal irregularities than other paraphilics? Data from the present study suggested that the answer is no. This study's findings, however, that sadists and exhibitionists had testosterone irregularities and that subjects in all of the six paraphilic groups had elevated LH and FSH levels provide support for biological theories of the paraphilias.

Psychoanalytic theories of development claim that problems resulting from separation-individuation anxiety, childhood sexual experiences and lack of resolution of Oedipal conflicts may surface when the demands of adult sexuality overwhelm the individual. In this study, hypotheses 5, 6, 7, and 8 (Do pedophiles have a higher incidence of father and/or mother absence and/or emotional distance, losses, and childhood sexual victimization than other paraphilias?) addressed this theory.

What kind of relationships do pedophiles have with their parents? The results of this study suggested that while there were no significant differences between pedophiles and non-pedophiles, most of the

paraphilic subjects reported negative childhood relationships with their fathers and positive relationships with their mothers. This finding supports separation-individuation theories which claim that an overly-protective mother and a distant father may be the source of anxiety during a stage in which a male child is trying to separate from his mother and form a distinct male identity. Psychoanalytic theory views a boys' feelings toward his mother and his resolution of the Oedipal complex through identification with his father as a critical determinant of adult relations and attitudes towards mature heterosexual relationships. The data in this study suggested a pattern of negative father-son relationships and positive mother-son relationships among the paraphilic subjects. According to psychoanalytic theory, this pattern results in unsatisfactory resolution of Oedipal conflicts and will lead to later difficulty establishing and maintaining mature heterosexual relationships.

Similarly, resolution of Oedipal conflicts, according to Psychoanalytic theory, could be disrupted through the loss (by death, separation or divorce) of a parent during childhood. Although the results of this study indicated no significant differences between the

pedophile and non-pedophile groups with respect to experience of childhood loss, 30-90% of all of the paraphilic subjects had lost a parent during childhood. These findings support psychoanalytic explanations of the paraphilias.

Alfred Adler theorized that birth order was one of the major childhood social influences on adult lifestyle (Schultz, 1976). Adler claimed that firstborn children had a period of "reign" until the second child was born and "dethroned" the firstborn. The first child, in an effort to regain his lost supremacy, strikes out in anger against the new child and/or his parents. As an adult, the firstborn may feel hostile toward others. Adler found that criminals and sexual offenders are often firstborns. The youngest child, in contrast, never faces dethronement by another child and may become the baby of the whole family. In adulthood, Adler claims, the youngest child may retain his childhood helplessness and dependency. He is used to being cared for by others and is unaccustomed to striving and struggling. He may, therefore, find it difficult to cope with the problems and adjustments of adulthood (Schultz, 1976). The results of this study supported this birth order theory of development. Most of the pedophiles in this study

were youngest children in their families of origin, and their sexual preference for children may have been an expression of the difficulty they had in adjusting to adult relationships. Most of the non-pedophiles in this study (and particularly the sadists), on the other hand, were firstborn children in their families of origin. The non-pedophiles (and particularly the sadists) in this study were also significantly more hostile (i.e. violent) than the pedophiles.

Findings in this study suggest that pedophiles share certain historical vulnerabilities. They are often youngest children in their families of origin and, according to Adlerian theory, may attempt to retain their childhood "baby of the family" status in adulthood. This helpless, dependent style could interfere with adjustments and flexibility required in more mature relationships. A second finding of this study was that many of the pedophile subjects reported positive mother-son relationships and poor childhood relationships with their fathers. Acccording to psychoanalytic theory this pattern results in unsatisfactory resolution of Oedipal conflicts and will lead to later difficulty establishing and maintaining mature heterosexual relationships. Additionally, a boy's lack of identification with this father may lead

to some gender-identity confusion. Although these two factors alone do not explain why some males develop pedophilic sexual orientations, they account for much of the vulnerability with which these men, as pre-adolescent boys, enter adolescence.

Adolescence, according to many theorists, is a particularly crucial stage in development. Erikson claimed that adolescence is a time when everything the person knows and learns about himself is integrated into a whole (Schultz, 1976). Ideally, a basic identity emerges from this phase. Those who do not emerge from this difficult stage with a sense of identity, according to Erikson, are not equipped to face coming adulthood. Instead, they may not know who or what they are or where they belong. They may seek a "negative" identity, one opposite to that prescribed by society, rather than no identification of any kind. Many of the pedophilic subjects in this study fell into this latter category. They became aware of their sexual preferences during adolescence. Although their pedophilia was not ego-dystonic, it was recognized as unusual.

The subjects in this study were not equipped to enter adolescence. Their pre-adolescent vulnerabilities (those associated with being youngest

children and having an unavailable father) were compounded by experiences during adolescence. Early adolescent experiences that may have been perceived positively included sexual involvement with an adult and sexual learning and experimentation with peers. In contrast, later adolescent experiences may have been perceived negatively. These included failed attempts at appropriate relationships, awareness of hormonal irregularities (and subsequent unstable body images), increasing social isolation, alcoholism, and awareness of different and unaccepatable sexual preference. These experiences created a conflict for a vulnerable boy during a vulnerable stage. His sexual experimentation during pre and early adolescence was perceived positively while his attempts at more appropriate and acceptable relationships failed. He was aware of how he felt "different" from peers in other ways. He may have had hormonal irregularitites and he may have been socially isolated. He might have sought a "negative" identity (i.e. contact with children) as an alternative to no identification at all (i.e. failure and isolation in attempted contacts with peers).

Although pedophiles appear to get developmentally "stuck" as young adolescents, earlier unresolved

conflicts are played out, reinforced, and exacerbated by hormonal irregularities and poorly defined and unstable body images during adolescence. Adolescence, as Erikson claimed, is a time when all of this past and present information about oneself is consolidated and integrated into an identity.

Pedophilia may involve a compromise formation growing out of a developmental conflict combined with biological vulnerabilites. It may protect people against castration anxiety and separation anxiety. Pedophiles do attempt to preserve object relations by maintaining contact with people, but with immature objects. Their restitutive identification with and narcissistic investment in these immature sexual objects (i.e. children) compensates for the early deprivation.

Future research with this population could test this theory through close attention to subjects pre-adolescent and adolescent histories, parent-child relationships and hormone levels. Future studies that examine the role of biological factors, such as hormones, on sexual behavior, would also improve our understanding of this population.

Practice. The results of this study have practical implications. One of the current treatment

modalities for this paraphilic population is group psychotherapy. Generally, the paraphilic groups are large (n=30) and composed of different categories of sexual offenders. As shown in Table 6, however, data from this study suggested that the six paraphilic categories were different in many ways. For example, a single, childless, college-educated, 35 year old homosexual pedophile who seeks an affectionate relationship with a child, has never been arrested, and who was sexually victimized as a child may have very different needs from a younger, high school educated, violent sadist. Likewise, a 27 year old single, childless exhibitionist who has experienced multiple arrests and is primarily attracted to women may have different therapeutic needs from a 38 year old married father who lost one or both parents during his childhood and is involved in an incestuous relationship with his 11 year old daughter. These and other differences among the paraphilic groups need to be considered and addressed in developing effective group treatment approaches with this population.

A second treatment approach is biological, usually in the form of antiandrogen medication to reduce testosterone levels. Results of this study indicated that even though the exhibitionist group had

significantly elevated testosterone levels, the other paraphilic groups had normal levels and the sadist group even had below-average testosterone levels. This finding suggests that the currently used biological interventions may not be appropriate for all paraphiliacs and instead should be considered on a case-by-case basis. Further, these antiandrogen drugs suppress sexual impulses other than the unwanted impulses. This, and other side-effects, may cause people to stop taking the drugs.

The results of this study could have implications for others beyond the limited field of practitioners who work with this population. Pedophile victims usually know the offender. Many homosexual pedophiles work with children and many heterosexual pedophiles live with children. They frequently have emotionally affectionate relationships with, and are trusted by the children. Parents and educators who teach children to be cautious around strangers, therefore, may be misguided in their efforts to protect their children. Alternative prevention efforts should be directed at educating children about inappropriate adult behavior (no matter who it is) within the context of their daily lives.

Conclusions

The six paraphilic groups in this study shared some constitutional factors, life experiences and attitudes that may play a role in the development of a paraphilic sexual orientation. Most of the paraphilic subjects in this study were white. Many of them had hormonal irregularities. The majority of these men reported negative childhood relationships with their fathers. Very few of them had a pedophile relative. Most of them, in spite of an arrest record and identification as a sexual offender, did not voluntarily seek treatment for their paraphilia.

What predisposes men to pedophilia? Specifically, which constitutional factors, personality traits, and life experiences differentiate pedophiles from non-pedophiles and possibly play a role in the development of a pedophilic sexual orientation? The results of this study indicated that homosexual pedophiles, heterosexual pedophiles, and bisexual pedophiles were as different from one another as they were from other paraphilic groups. It is difficult, therefore, to make generalizations about pedophiles as a single group.

A homosexual pedophile may be the youngest child in his family of origin. As a child, he may be dependent on an overly protective mother and feel

hostile towards an emotionally detached or abusive father. There may be an alcoholic in the family. In spite of these stressors, his family remains intact. The family probably goes to church. He probably learned (or learned incorrectly) about sex from peers during his childhood or puberty and he may have experimented with them. During childhood or puberty about one third of the homosexual pedophiles are also involved in a sexual relationship with an adult who is not a family member. By puberty, hormonal irregularities might become evident. At about this same time he is becoming aware of his sexual preference and how this orientation is "different" from that of his peers. He may attempt, unsuccessfully, to establish heterosexual relationships during adolescence and early adulthood. He may start drinking. With this history he attends college and perhaps graduate school. As an adult he doesn't marry or have children, but he pursues an occupation in which he can work with children. By the time he is 35 he probably has been arrested more than once for sexual relationships with children but he will not willingly seek treatment.

A heterosexual pedophile is probably the youngest or middle child in his family of origin. As children, about one half of heterosexual pedophiles have positive

relationships with their mothers and one half have negative relationships with their mothers. He probably feels hostile towards an emotionally detached or abusive father. There may be an alcoholic in the family. About one half of these families remain intact and another one half are broken through death or divorce of parents. The family probably goes to church. He probably learns (or learns incorrectly) about sex from peers during childhood or puberty and he may have experimented with these peers. During childhood, or at puberty, about 25% of the heterosexual pedophiles are also involved in a sexual relationship with an adult who, in most cases, is not a family member. By puberty, hormonal irregularities might become evident. He may start drinking during adolescence. Although many of the heterosexual pedophiles drop out of school, about 60% of them complete high school. He will probably get married and have children. He will probably pursue an occupation working with adults. He may become incestuously involved with his daughter/s. By the time he is 38 he has probably been arrested more than once for his sexual behavior but will not seek treatment on his own.

A bisexual pedophile is probably the youngest or middle child in his family of origin. As children, most of the bisexual pedophiles have negative

relationships with both of their parents. He probably feels hostile towards an emotionally detached or abusive father. There may be an alcoholic in the family. Ninety percent of these families are broken through death or divorce of parents. The family probably goes to church. He probably learns (or learns incorrectly) about sex from peers during childhood or puberty and he may have experimented with these peers. During childhood, or at puberty, nearly one half of the bisexual pedophiles are also involved in a sexual relationship with an adult who, in most cases, is not a family member. By puberty, hormonal irregularities might become evident. He may also start drinking during adolescence. Although many of the bisexual pedophiles drop out of school, about 70% of them complete high school. He will probably pursue an occupation working with adults. By the time he is 37 he has probably been arrested more than once for his sexual behavior but will not seek treatment on his own.

In spite of their differences, these three groups of pedophiles share certain constitutional factors and life experiences that differentiate them from non-pedophile paraphilics and possibly play a role in the development of a pedophilic sexual orientation. Nearly all of the pedophiles are non-violent. They are usually the youngest child in their family of origin.

They are generally educated (nearly one half of them have completed college and/or graduate school). They often pursue occupations working with children (e.g. coach, teacher, pediatrician) or are involved in incestuous relationships with their own children.

Although abnormal hormone levels may affect sexual behavior, a biological predisposition, if it exists, may interact with social and family circumstances in the development of paraphilias. 51% of the pedophiles and 68& of the non-pedophiles in this study have hormonal (testosterone) irregularities. About one-half of the subjects in all of the paraphilic groups had elevated LH and FSH levels. A man's plasma testosterone level may be depressed or elevated, however, by a malfunctioning liver because androgens are metabolized by the liver (Berlin & Schaerf, 1985). This is turn can affect FSH and LH production by the pituitary. Alcohol affects liver functioning. As noted in the researcher's journal observations, many of the paraphilic subjects are alcoholics. While this observation of a high incidence of alcoholism was not formally tested, it may have important implications for sexual behavior.

The results of this study suggest that generalizations about pedophiles as a single group cannot be made. A man may be predisposed to a

paraphilic sexual orientation when hormonal irregularities exist and when childhood familial relationships are disrupted. Results of this study suggested that there are few biological, psychological, and social similarities among paraphilic groups. The two relatively consistent variables among these groups, however, were hormonal irregularities and a negative father-son relationship. Therefore, it would appear that critical factors in the development of a paraphilic sexual orientation may be a biological predisposition and a boy's relationship with his father.

Appendix A

Coding Sheet

DEMOGRAPHIC ID_____

____Age
____Birth order 1=youngest 2=middle 3=oldest
____Race 1=white 2=black 3=other
____Marital status 1=single 2=married 3=separated/divorced
____Children 1=none 2=one 3=two+
____Education years completed
____Occupation
____~~Current income~~ Data unavailable in charts
____~~Date when income began~~
____Referral source 1=self 2=court 3=other
____Arrests 1=none 2=one 3=two+
____Religion 1=Protestant 2=Catholic 3=Jewish 4=other

PSYCHOLOGICAL - MMPI scale scores

____L
____F
____K
____1
____2
____3
____4
____5
____6
____7
____8
____9
____0

BIOLOGICAL - Endocrine lab test results

____FSH
____LH
____Testosterone
____Klinefelter's Syndrome 1=present 2=absent

SOCIAL

____Relationship with mother
____Relationship with father
____Pedophile relative
____Losses
____Number of sexual involvements
____Age of first sex with an adult
____Violence
____Incest

Appendix B

Social Variables

ID_____

Please read the history portion of this person's chart and then circle the number that best describes his experiences. Circle only one number for each of the questions.

How does he describe his relationship with his father or an adult male who helped to raise him?

1. Positively (e.g. mutual liking, loving, caring, respect).
2. Somewhat negatively (e.g. parent or child feels neither like nor dislike or feels some dislike toward the other).
3. Negatively (e.g. parent or child doesn't like the other; father or adult male didn't help raise him).
4. Unknown

How does he describe his relationship with his mother or an adult female who helped to raise him?

1. Positively (e.g. mutual liking, loving, caring, respect).
2. Somewhat negatively (e.g. parent or child feels neither like nor dislike or feels some dislike toward the other).
3. Negatively (e.g. parent or child doesn't like the other; mother or adult female didn't help raise him).
4. Unknown

Does he describe pedophile relatives? (i.e. father, brother, grandfather, uncle or other adult male who helped raise him?

1. No
2. Maybe, but not sure
3. Yes
4. Unknown

Did he experience losses?

1. Father and mother are in the home.
2. ~~Father or mother is not in the home.~~
3. ~~Neither parent is in the home.~~
4. Parent, grandparent or other adult who helped to raise him left the home or died before age 14.
5. Unknown

How many sexual involvements with adults did he have before age 14?

1. 0
2. A few (exact number if possible) ____
3. Many (exact number if possible) ____
4. Unknown

If he was sexually victimized as a child, how old was he when it began?

_____ Age

Please read the police report and circle the number that best describes his offense.

Did he use a weapon or violence against his victim?

1. Yes
2. No

Was he involved in a sexual relationship with his own child?

1. Yes
2. No
3. Unknown

Appendix C

Inter-rater Reliability

```
11:22:26   inter-rater reliability
           THE UNIVERSITY OF MARYLAND CSC IBM 3081GX - D   VM/SP CMS

                    R E L I A B I L I T Y   A N A L Y S I S   -   S C A L

  1.      X1
  2.      X2
  3.      X3
  4.      X4
  5.      X5
  6.      X6
  7.      X7
  8.      Y1
  9.      Y2
 10.      Y3
 11.      Y4
 12.      Y5
 13.      Y6
 14.      Y7

  * * * WARNING * * *  ZERO VARIANCE ITEMS

RELIABILITY COEFFICIENTS

N OF CASES =        8.0                    N OF ITEMS = 14

CORRELATION BETWEEN FORMS =      .8977     EQUAL LENGTH SPEARMAN-BROWN =      .9461

GUTTMAN SPLIT-HALF =             .9448     UNEQUAL-LENGTH SPEARMAN-BROWN =    .9461

  7 ITEMS IN PART 1                          7 ITEMS IN PART 2

ALPHA FOR PART 1 =               .1967     ALPHA FOR PART 2 =                 .0215
```

11:22:26 inter-rater reliability
THE UNIVERSITY OF MARYLAND CSC IBM 3081GX - D VM/SP CMS

R E L I A B I L I T Y A N A L Y S I S - S C A L

1. X1
2. X2
3. X3
4. X4
5. X5
6. X7
7. Y1
8. Y2
9. Y3
10. Y4
11. Y5
12. Y7

* * * WARNING * * * ZERO VARIANCE ITEMS

RELIABILITY COEFFICIENTS

N OF CASES = 8.0
N OF ITEMS = 12

CORRELATION BETWEEN FORMS = .6883
EQUAL LENGTH SPEARMAN-BROWN = .8154

GUTTMAN SPLIT-HALF = .8084
UNEQUAL-LENGTH SPEARMAN-BROWN = .8154

6 ITEMS IN PART 1
6 ITEMS IN PART 2

ALPHA FOR PART 1 = .3300
ALPHA FOR PART 2 = -.1099

Appendix D

Structured Interview Guide

Phipps Clinic, Johns Hopkins Hospital

JHMI - HPPC

PATIENT'S PLATE

HISTORY WORK SHEET

Informants: _____

_____

FAMILY HISTORY:

FATHER:

Age: Health:

If dead, age at death and date and cause of death:

Education: Occupation:

Personality:

Relationship with patient:

MOTHER:

Age: Health:

If dead, age at death and date and cause of death:

Education: Occupation:

Personality:

Relationship with patient:

SIBLINGS: (In chronological order)

_____: Age: Marital condition:

Health: Occupation:

Personality

JHHX020010 Relationship with patient:

HISTORY WORK SHEET

SIBLINGS: (In chronological order)

_____: Age: Marital condition:

Health: Occupation:

Personality:

Relationship with patient:

_____: Age: Marital condition:

Health: Occupation:

Personality:

Relationship with patient:

If miscarriages, stillbirt or abortions, enumerate these as well.

If other siblings are described on a separate sheet, check this box /___/

FAMILY HEALTH HISTORY: (State whether none or unknown).

Familial diseases:

Neurological:

Psychiatric problems:

SOCIAL POSITION AND HOME ATMOSPHERE (during patient's developmental years).

Socioeconomic Class:

Housing:

Persons other than above living in home:

Significant happenings at home (e.g., illnesses, moves):

Emotional relationships of family members:

Page 3
HISTORY WORK SHEET

PERSONAL HISTORY: (State if information not known).

Gestation and Birth

Date of Birth: Place of Birth:

Mother's condition during pregnancy:

Full-term birth? Normal delivery?

Breast fed or bottle fed?

EARLY DEVELOPMENT:

Delicate or healthy baby?

Times of developmental milestones (compare with sibs):

CHILDHOOD BEHAVIOR:

Usual activities:

Abnormalities:

Enuresis:

Speech problems:

Phobias:

Other problems:

HEALTH DURING CHILDHOOD:

Infections: Hospitalizations:

Seizures: Trauma:

SCHOOL:

Age begun: Age finished:

Last grade completed:

Academic performance:

Special abilities or disabilities:

Relationship to schoolmates and teachers:

HISTORY WORK SHEET

OCCUPATIONS: (In detail).

Age at starting work:

Jobs held in chronological order, with reasons for change:

Satisfaction in work:

If additional work history is detailed on extra sheet, check this box /___/

LIVING SITUATIONS SINCE SEPARATION FROM FAMILY (listed chronologically, giving dates):

PRESENT LIVING SITUATION:

MENSTRUAL HISTORY:

Age at menarche:

How regarded:

Abnormal features:

Emotional symptoms:

Date of last period:

Climacteric symptoms:

SEXUAL INCLINATIONS AND PRACTICE:

How sexual information acquired:

How received:

Masturbation (age, frequency, guilt):

CONT. SEXUAL INCLINATION AND PRACTICE:

Early sexual interests and experiences:

Recent sexual interests, experiences and satisfaction:

MARITAL HISTORY:

Duration of acquaintance before first marriage:

Parental attitude:

Spouse's Name: Occupation:

Personality:

Compatibility:

Sexual satisfaction:

Contraceptive measures:

If married more than once or involved in other steady sexual relationships, give details on additional sheet and check this box /___/

If separated or divorced, give details:

CHILDREN: (In chronological order):

_____: Age: Health:

Personality:

Scholastic or occupational achievements:

Marital status:

Relationship to patient:

_____: Age: Health:

Personality:

Scholastic or occupational achievements:

Marital status:

Relationship to patient:

If other children are described on additional sheet, check this box ___

HISTORY WORK SHEET

HABITS: (Specify whether drug was present or absent and amount taken. Discuss past and present habits).

Tobacco:

Alcohol:

Marijuana:

Hallucinogens:

Amphetamines/Cocaine:

Barbiturates/Sedatives:

Opiates:

RELIGIOUS AFFILIATION AND INTEREST:

PERSONALITY BEFORE ILLNESS: (In this description of the personality prior to the beginning of the mental illness, do not be satisfied with a series of adjectives, but give a picture of an individual.

1. Social relations: (To family, friends, colleagues, neighbors, etc.)

2. Interests: (Books, movies, music, hobbies, etc.)

3. Predominant mood: (Cheerful, worrying, optimistic, anxious etc; stable or fluctuating).

4. Attitude to self (self-conscious, conceited, self-doubting, etc.)

5. Standards: (Morals, religion, etc.)

6. Energy and initiative:

HISTORY WORK SHEET

CONT. PERSONALITY BEFORE ILLNESS:

7. Fantasy life (Daydreams)

8. Ambitions:

MEDICAL HISTORY: (Chronological and in detail): Include all illnesses, operations and accidents.

PREVIOUS PSYCHIATRIC HISTORY: Dates, duration, symptoms, treatment received and where, in chronological order).

PRESENT ILLNESS: (Additional information not already recorded elsewhere):

MENTAL STATUS EXAM

General appearance and behavior

Speech

Mood/Affect

Hallucinations and Delusions

Obsessions, Compulsions, Phobias

Cognition (includes mini-mental state exam)

Insight/Judgment

Formulation

Diagnosis

Recommendation

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY BIR_ORD

GRPCAT(GROUP CATEGORY BIR_ORD(BIRTH ORDER)

FREQUENCY / PERCENT / ROW PCT / COL PCT	youngest 1	middle 2	oldest 3	TOTAL
Non-pedophiles 0	26 13.54 29.89 35.62	29 15.10 33.33 45.31	32 16.67 36.78 58.18	87 45.31
Pedophiles 1	47 24.48 44.76 64.38	35 18.23 33.33 54.69	23 11.98 21.90 41.82	105 54.69
TOTAL	73 38.02	64 33.33	55 28.65	192 100.00

FREQUENCY MISSING = 19

STATISTICS FOR TABLE OF GRPCAT BY BIR_ORD

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	6.445	0.040
LIKELIHOOD RATIO CHI-SQUARE	2	6.480	0.039
MANTEL-HAENSZEL CHI-SQUARE	1	6.369	0.012
PHI		0.183	
CONTINGENCY COEFFICIENT		0.180	
CRAMER'S V		0.183	

EFFECTIVE SAMPLE SIZE = 192
FREQUENCY MISSING = 19

Appendix E-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY BIR_ORD

GRPID(GROUP ID) BIR_ORD(BIRTH ORDER)

FREQUENCY / PERCENT / ROW PCT / COL PCT	youngest$_1$	middle$_2$	oldest$_3$	TOTAL
1 Homosexual Pedophiles	27 14.06 49.09 36.99	17 8.85 30.91 26.56	11 5.73 20.00 20.00	55 28.65
2 Heterosexual Pedophiles	16 8.33 39.02 21.92	14 7.29 34.15 21.88	11 5.73 26.83 20.00	41 21.35
3 Exhibitionists	14 7.29 34.15 19.18	16 8.33 39.02 25.00	11 5.73 26.83 20.00	41 21.35
4 Sadists	4 2.08 22.22 5.48	4 2.08 22.22 6.25	10 5.21 55.56 18.18	18 9.38
5 Atypical Paraphilias	8 4.17 28.57 10.96	9 4.69 32.14 14.06	11 5.73 39.29 20.00	28 14.58
6 Bisexual Pedophiles	4 2.08 44.44 5.48	4 2.08 44.44 6.25	1 0.52 11.11 1.82	9 4.69
TOTAL	73 38.02	64 33.33	55 28.65	192 100.00

FREQUENCY MISSING = 19

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY BIR_ORD

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	13.550	0.195
LIKELIHOOD RATIO CHI-SQUARE	10	13.074	0.220
MANTEL-HAENSZEL CHI-SQUARE	1	4.108	0.043
PHI		0.266	
CONTINGENCY COEFFICIENT		0.257	
CRAMER'S V		0.188	

EFFECTIVE SAMPLE SIZE = 192
FREQUENCY MISSING = 19

Appendix F-1

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY RACE

GRPCAT(GROUP CATEGORY)
RACE

FREQUENCY / PERCENT / ROW PCT / COL PCT	white 1	black or other 2	TOTAL
0 Non-pedophiles	83	13	96
	39.34	6.16	45.50
	86.46	13.54	
	45.11	48.15	
1 pedophiles	101	14	115
	47.87	6.64	54.50
	87.83	12.17	
	54.89	51.85	
TOTAL	184	27	211
	87.20	12.80	100.00

STATISTICS FOR TABLE OF GRPCAT BY RACE

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	1	0.088	0.767
LIKELIHOOD RATIO CHI-SQUARE	1	0.088	0.767
CONTINUITY ADJ. CHI-SQUARE	1	0.008	0.929
MANTEL-HAENSZEL CHI-SQUARE	1	0.087	0.768
FISHER'S EXACT TEST (1-TAIL)			0.463
(2-TAIL)			0.837
PHI		-0.020	
CONTINGENCY COEFFICIENT		0.020	
CRAMER'S V		-0.020	

SAMPLE SIZE = 211

Appendix F-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY RACE

GRPID(GROUP ID) RACE

FREQUENCY / PERCENT / ROW PCT / COL PCT	white 1	black or other 2	TOTAL
1 Homosexual pedophiles	58 27.49 90.63 31.52	6 2.84 9.38 22.22	64 30.33
2 Heterosexual pedophiles	35 16.59 85.37 19.02	6 2.84 14.63 22.22	41 19.43
3 Exhibitionists	35 16.59 85.37 19.02	6 2.84 14.63 22.22	41 19.43
4 Sadists	20 9.48 95.24 10.87	1 0.47 4.76 3.70	21 9.95
5 Atypical paraphilias	28 13.27 82.35 15.22	6 2.84 17.65 22.22	34 16.11
6 Bisexual pedophiles	8 3.79 80.00 4.35	2 0.95 20.00 7.41	10 4.74
TOTAL	184 87.20	27 12.80	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY RACE

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	3.316	0.651
LIKELIHOOD RATIO CHI-SQUARE	5	3.577	0.612
MANTEL-HAENSZEL CHI-SQUARE	1	0.917	0.338
PHI		0.125	
CONTINGENCY COEFFICIENT		0.124	
CRAMER'S V		0.125	

SAMPLE SIZE = 211
WARNING: 25% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY MAR_STAT

GRPCAT(GROUP CATEGORY) MAR_STAT(MARITAL STATUS)

FREQUENCY / PERCENT / ROW PCT / COL PCT	single 1	married 2	separated/ divorced 3	TOTAL
0 Non-pedophiles	59 27.96 61.46 47.58	19 9.00 19.79 43.18	18 8.53 18.75 41.86	96 45.50
1 pedophiles	65 30.81 56.52 52.42	25 11.85 21.74 56.82	25 11.85 21.74 58.14	115 54.50
TOTAL	124 58.77	44 20.85	43 20.38	211 100.00

STATISTICS FOR TABLE OF GRPCAT BY MAR_STAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	0.542	0.763
LIKELIHOOD RATIO CHI-SQUARE	2	0.543	0.762
MANTEL-HAENSZEL CHI-SQUARE	1	0.508	0.476
PHI		0.051	
CONTINGENCY COEFFICIENT		0.051	
CRAMER'S V		0.051	

SAMPLE SIZE = 211

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY MAR_STAT

GRPID(GROUP ID) MAR_STAT(MARITAL STATUS)

FREQUENCY / PERCENT / ROW PCT / COL PCT	single 1	married 2	separated/ divorced 3	TOTAL
1 Homosexual pedophiles	45 21.33 70.31 36.29	7 3.32 10.94 15.91	12 5.69 18.75 27.91	64 30.33
2 Heterosexual pedophiles	12 5.69 29.27 9.68	17 8.06 41.46 38.64	12 5.69 29.27 27.91	41 19.43
3 Exhibitionists	26 12.32 63.41 20.97	9 4.27 21.95 20.45	6 2.84 14.63 13.95	41 19.43
4 Sadists	11 5.21 52.38 8.87	5 2.37 23.81 11.36	5 2.37 23.81 11.63	21 9.95
5 Atypical paraphilias	22 10.43 64.71 17.74	5 2.37 14.71 11.36	7 3.32 20.59 16.28	34 16.11
6 Bisexual pedophiles	8 3.79 80.00 6.45	1 0.47 10.00 2.27	1 0.47 10.00 2.33	10 4.74
TOTAL	124 58.77	44 20.85	43 20.38	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY MAR_STAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	24.440	0.007
LIKELIHOOD RATIO CHI-SQUARE	10	24.619	0.006
MANTEL-HAENSZEL CHI-SQUARE	1	0.302	0.583
PHI		0.340	
CONTINGENCY COEFFICIENT		0.322	
CRAMER'S V		0.241	

SAMPLE SIZE = 211
WARNING: 22% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY CHILDREN

GRPCAT(GROUP CATEGORY) CHILDREN(NUMBER OF CHILDREN)

	FREQUENCY PERCENT ROW PCT COL PCT	None 1	One 2	Two + 3	TOTAL
Non-pedophiles	0	61 31.77 67.78 50.83	13 6.77 14.44 50.00	16 8.33 17.78 34.78	90 46.88
Pedophiles	1	59 30.73 57.84 49.17	13 6.77 12.75 50.00	30 15.63 29.41 65.22	102 53.13
TOTAL		120 62.50	26 13.54	46 23.96	192 100.00

FREQUENCY MISSING = 19

STATISTICS FOR TABLE OF GRPCAT BY CHILDREN

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	3.558	0.169
LIKELIHOOD RATIO CHI-SQUARE	2	3.612	0.164
MANTEL-HAENSZEL CHI-SQUARE	1	3.090	0.079
PHI		0.136	
CONTINGENCY COEFFICIENT		0.135	
CRAMER'S V		0.136	

EFFECTIVE SAMPLE SIZE = 192
FREQUENCY MISSING = 19

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY CHILDREN

GRPID(GROUP ID) CHILDREN(NUMBER OF CHILDREN)

FREQUENCY / PERCENT / ROW PCT / COL PCT	None 1	One 2	Two + 3	TOTAL
1 Homosexual pedophiles	39 20.31 73.58 32.50	7 3.65 13.21 26.92	7 3.65 13.21 15.22	53 27.60
2 Heterosexual pedophiles	12 6.25 30.00 10.00	5 2.60 12.50 19.23	23 11.98 57.50 50.00	40 20.83
3 Exhibitionists	28 14.58 71.79 23.33	5 2.60 12.82 19.23	6 3.13 15.38 13.04	39 20.31
4 Sadists	14 7.29 66.67 11.67	4 2.08 19.05 15.38	3 1.56 14.29 6.52	21 10.94
5 Atypical paraphilias	19 9.90 63.33 15.83	4 2.08 13.33 15.38	7 3.65 23.33 15.22	30 15.63
6 Bisexual pedophiles	8 4.17 88.89 6.67	1 0.52 11.11 3.85	0 0.00 0.00 0.00	9 4.69
TOTAL	120 62.50	26 13.54	46 23.96	192 100.00

FREQUENCY MISSING = 19

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY CHILDREN

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	35.485	0.000
LIKELIHOOD RATIO CHI-SQUARE	10	34.489	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	1.269	0.260
PHI		0.430	
CONTINGENCY COEFFICIENT		0.395	
CRAMER'S V		0.304	

EFFECTIVE SAMPLE SIZE = 192
FREQUENCY MISSING = 19
WARNING: 22% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY OCCUPAT

GRPCAT(GROUP CATEGORY)
OCCUPAT(OCCUPATION)

FREQUENCY PERCENT ROW PCT COL PCT	Works with children 1	Doesn't work with children 2	TOTAL
0 Non-pedophiles	5 2.87 6.10 16.13	77 44.25 93.90 53.85	82 47.13
1 pedophiles	26 14.94 28.26 83.87	66 37.93 71.74 46.15	92 52.87
TOTAL	31 17.82	143 82.18	174 100.00

FREQUENCY MISSING = 37

STATISTICS FOR TABLE OF GRPCAT BY OCCUPAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	1	14.545	0.000
LIKELIHOOD RATIO CHI-SQUARE	1	15.855	0.000
CONTINUITY ADJ. CHI-SQUARE	1	13.071	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	14.462	0.000
FISHER'S EXACT TEST (1-TAIL)			0.000
(2-TAIL)			
PHI		-0.289	
CONTINGENCY COEFFICIENT		0.278	
CRAMER'S V		-0.289	

EFFECTIVE SAMPLE SIZE = 174
FREQUENCY MISSING = 37
WARNING: 18% OF THE DATA ARE MISSING.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY OCCUPAT

GRPID(GROUP ID) OCCUPAT(OCCUPATION)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Works with children	Doesn't work with children	TOTAL
1 Homosexual pedophiles	21 12.07 43.75 67.74	27 15.52 56.25 18.88	48 27.59
2 Heterosexual pedophiles	4 2.30 11.76 12.90	30 17.24 88.24 20.98	34 19.54
3 Exhibitionists	1 0.57 2.86 3.23	34 19.54 97.14 23.78	35 20.11
4 Sadists	1 0.57 5.56 3.23	17 9.77 94.44 11.89	18 10.34
5 Atypical paraphilias	3 1.72 10.34 9.68	26 14.94 89.66 18.18	29 16.67
6 Bisexual pedophiles	1 0.57 10.00 3.23	9 5.17 90.00 6.29	10 5.75
TOTAL	31 17.82	143 82.18	174 100.00

FREQUENCY MISSING = 37

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY OCCUPAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	31.619	0.000
LIKELIHOOD RATIO CHI-SQUARE	5	30.052	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	15.299	0.000
PHI		0.426	
CONTINGENCY COEFFICIENT		0.392	
CRAMER'S V		0.426	

EFFECTIVE SAMPLE SIZE = 174
FREQUENCY MISSING = 37
WARNING: 18% OF THE DATA ARE MISSING.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY REFER

GRPCAT(GROUP CATEGORY) REFER(REFERRAL SOURCE)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Self 1	Court 2	Other 3	TOTAL
0 Non-pedophile	8 4.42 9.64 33.33	17 9.39 20.48 43.59	58 32.04 69.88 49.15	83 45.86
1 Pedophile	16 8.84 16.33 66.67	22 12.15 22.45 56.41	60 33.15 61.22 50.85	98 54.14
TOTAL	24 13.26	39 21.55	118 65.19	181 100.00

FREQUENCY MISSING = 30

STATISTICS FOR TABLE OF GRPCAT BY REFER

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	2.113	0.348
LIKELIHOOD RATIO CHI-SQUARE	2	2.151	0.341
MANTEL-HAENSZEL CHI-SQUARE	1	2.044	0.153
PHI		0.108	
CONTINGENCY COEFFICIENT		0.107	
CRAMER'S V		0.108	

EFFECTIVE SAMPLE SIZE = 181
FREQUENCY MISSING = 30
WARNING: 14% OF THE DATA ARE MISSING.

TABLE OF GRPID BY REFER

GRPID(GROUP ID) REFER(REFERRAL SOURCE)

	Self 1	Court 2	Other 3	TOTAL
1 Homosexual pedophiles	6 3.31 12.24 25.00	10 5.52 20.41 25.64	33 18.23 67.35 27.97	49 27.07
2 Heterosexual pedophiles	9 4.97 23.08 37.50	10 5.52 25.64 25.64	20 11.05 51.28 16.95	39 21.55
3 Exhibitionists	2 1.10 5.13 8.33	10 5.52 25.64 25.64	27 14.92 69.23 22.88	39 21.55
4 Sadists	2 1.10 13.33 8.33	6 3.31 40.00 15.38	7 3.87 46.67 5.93	15 8.29
5 Atypical paraphiliacs	4 2.21 13.79 16.67	1 0.55 3.45 2.56	24 13.26 82.76 20.34	29 16.02
6 Bisexual pedophiles	1 0.55 10.00 4.17	2 1.10 20.00 5.13	7 3.87 70.00 5.93	10 5.52
TOTAL	24 13.26	39 21.55	118 65.19	181 100.00

FREQUENCY MISSING = 30

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY REFER

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	15.818	0.105
LIKELIHOOD RATIO CHI-SQUARE	10	17.881	0.057
MANTEL-HAENSZEL CHI-SQUARE	1	1.053	0.305
PHI		0.296	
CONTINGENCY COEFFICIENT		0.283	
CRAMER'S V		0.209	

EFFECTIVE SAMPLE SIZE = 181
FREQUENCY MISSING = 30
WARNING: 14% OF THE DATA ARE MISSING.
WARNING: 27% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix K-1

SAS

TABLE OF GRPCAT BY ARRESTS

GRPCAT(GROUP CATEGORY) ARRESTS

FREQUENCY / PERCENT / ROW PCT / COL PCT	None 1	One 2	Two+ 3	Unknown 9	TOTAL
0 Non-pedophiles	19 9.84 21.11 55.88	24 12.44 26.67 30.38	47 24.35 52.22 59.49	0 0.00 0.00 0.00	90 46.63
1 Pedophiles	15 7.77 14.56 44.12	55 28.50 53.40 69.62	32 16.58 31.07 40.51	1 0.52 0.97 100.00	103 53.37
TOTAL	34 17.62	79 40.93	79 40.93	1 0.52	193 100.00

FREQUENCY MISSING = 12

STATISTICS FOR TABLE OF GRPCAT BY ARRESTS

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	3	15.679	0.001
LIKELIHOOD RATIO CHI-SQUARE	3	16.345	0.001
MANTEL-HAENSZEL CHI-SQUARE	1	0.380	0.538
PHI		0.285	
CONTINGENCY COEFFICIENT		0.274	
CRAMER'S V		0.285	

EFFECTIVE SAMPLE SIZE = 193
FREQUENCY MISSING = 12
WARNING: 25% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

SAS

TABLE OF GRPID BY ARRESTS

GRPID(GROUP ID) ARRESTS

FREQUENCY / PERCENT / ROW PCT / COL PCT	None 1	One 2	Two+ 3	Unknown 9	TOTAL
1 Homosexual pedophiles	11 5.70 19.64 32.35	31 16.06 55.36 39.24	13 6.74 23.21 16.46	1 0.52 1.79 100.00	56 29.02
2 Heterosexual pedophiles	4 2.07 10.26 11.76	19 9.84 48.72 24.05	16 8.29 41.03 20.25	0 0.00 0.00 0.00	39 20.21
3 Exhibitionists	4 2.07 10.26 11.76	9 4.66 23.08 11.39	26 13.47 66.67 32.91	0 0.00 0.00 0.00	39 20.21
4 Sadists	5 2.59 27.78 14.71	3 1.55 16.67 3.80	10 5.18 55.56 12.66	0 0.00 0.00 0.00	18 9.33
5 Atypical paraphiliacs	10 5.18 30.30 29.41	12 6.22 36.36 15.19	11 5.70 33.33 13.92	0 0.00 0.00 0.00	33 17.10
6 Bisexual pedophiles	0 0.00 0.00 0.00	5 2.59 62.50 6.33	3 1.55 37.50 3.80	0 0.00 0.00 0.00	8 4.15
TOTAL	34 17.62	79 40.93	79 40.93	1 0.52	193 100.00

FREQUENCY MISSING = 12

SAS

STATISTICS FOR TABLE OF GRPID BY ARRESTS

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	15	32.617	0.005
LIKELIHOOD RATIO CHI-SQUARE	15	34.391	0.003
MANTEL-HAENSZEL CHI-SQUARE	1	0.016	0.900
PHI		0.411	
CONTINGENCY COEFFICIENT		0.380	
CRAMER'S V		0.237	

EFFECTIVE SAMPLE SIZE = 193
FREQUENCY MISSING = 12
WARNING: 41% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY RELIG

GRPCAT(GROUP CATEGORY) RELIG(RELIGION)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Protestant 1	Catholic 2	Jewish 3	Other 4	Unknown 5	TOTAL
0 Non-pedophiles	29	19	3	38	0	89
	14.80	9.69	1.53	19.39	0.00	45.41
	32.58	21.35	3.37	42.70	0.00	
	40.85	43.18	42.86	52.05	0.00	
1 pedophiles	42	25	4	35	1	107
	21.43	12.76	2.04	17.86	0.51	54.59
	39.25	23.36	3.74	32.71	0.93	
	59.15	56.82	57.14	47.95	100.00	
TOTAL	71	44	7	73	1	196
	36.22	22.45	3.57	37.24	0.51	100.00

FREQUENCY MISSING = 15

STATISTICS FOR TABLE OF GRPCAT BY RELIG

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	4	2.835	0.586
LIKELIHOOD RATIO CHI-SQUARE	4	3.212	0.523
MANTEL-HAENSZEL CHI-SQUARE	1	1.525	0.217
PHI		0.120	
CONTINGENCY COEFFICIENT		0.119	
CRAMER'S V		0.120	

EFFECTIVE SAMPLE SIZE = 196
FREQUENCY MISSING = 15
WARNING: 40% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix L-2
ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY RELIG

GRPID(GROUP ID) RELIG(RELIGION)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Protestant 1	Catholic 2	Jewish 3	Other 4	Unknown 5	TOTAL
1 Homosexual pedophiles	20	20	2	18	0	60
	10.20	10.20	1.02	9.18	0.00	30.61
	33.33	33.33	3.33	30.00	0.00	
	28.17	45.45	28.57	24.66	0.00	
2 Heterosexual pedophiles	17	3	2	15	1	38
	8.67	1.53	1.02	7.65	0.51	19.39
	44.74	7.89	5.26	39.47	2.63	
	23.94	6.82	28.57	20.55	100.00	
3 Exhibitionists	11	7	2	19	0	39
	5.61	3.57	1.02	9.69	0.00	19.90
	28.21	17.95	5.13	48.72	0.00	
	15.49	15.91	28.57	26.03	0.00	
4 Sadists	7	7	1	6	0	21
	3.57	3.57	0.51	3.06	0.00	10.71
	33.33	33.33	4.76	28.57	0.00	
	9.86	15.91	14.29	8.22	0.00	
5 Atypical paraphiliacs	11	5	0	13	0	29
	5.61	2.55	0.00	6.63	0.00	14.80
	37.93	17.24	0.00	44.83	0.00	
	15.49	11.36	0.00	17.81	0.00	
6 Bisexual pedophiles	5	2	0	2	0	9
	2.55	1.02	0.00	1.02	0.00	4.59
	55.56	22.22	0.00	22.22	0.00	
	7.04	4.55	0.00	2.74	0.00	
TOTAL	71	44	7	73	1	196
	36.22	22.45	3.57	37.24	0.51	100.00

FREQUENCY MISSING = 15

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY RELIG

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	20	21.023	0.396
LIKELIHOOD RATIO CHI-SQUARE	20	22.043	0.338
MANTEL-HAENSZEL CHI-SQUARE	1	0.003	0.957
PHI		0.328	
CONTINGENCY COEFFICIENT		0.311	
CRAMER'S V		0.164	

EFFECTIVE SAMPLE SIZE = 196
FREQUENCY MISSING = 15
WARNING: 53% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY EDUCAT

GRPCAT(GROUP CATEGORY) EDUCAT(EDUCATION CATEGORY, GS HS COLL GRAD)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Grade School 1	High School 2	College 3	Graduate school 4	TOTAL
Non-pedophiles 0	6	52	33	5	96
	2.84	24.64	15.64	2.37	45.50
	6.25	54.17	34.38	5.21	
	31.58	49.52	55.93	17.86	
Pedophiles 1	13	53	26	23	115
	6.16	25.12	12.32	10.90	54.50
	11.30	46.09	22.61	20.00	
	68.42	50.48	44.07	82.14	
TOTAL	19	105	59	28	211
	9.00	49.76	27.96	13.27	100.00

STATISTICS FOR TABLE OF GRPCAT BY EDUCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	3	13.388	0.004
LIKELIHOOD RATIO CHI-SQUARE	3	14.309	0.003
MANTEL-HAENSZEL CHI-SQUARE	1	1.223	0.269
PHI		0.252	
CONTINGENCY COEFFICIENT		0.244	
CRAMER'S V		0.252	

SAMPLE SIZE = 211

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY EDUCAT

GRPID(GROUP ID) EDUCAT(EDUCATION CATEGORY, GS HS COLL GRAD)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Grade school 1	High school 2	College 3	Graduate school 4	TOTAL
1 Homosexual pedophiles	5 2.37 7.81 26.32	21 9.95 32.81 20.00	19 9.00 29.69 32.20	19 9.00 29.69 67.86	64 30.33
2 Heterosexual pedophiles	7 3.32 17.07 36.84	25 11.85 60.98 23.81	5 2.37 12.20 8.47	4 1.90 9.76 14.29	41 19.43
3 Exhibitionists	2 0.95 4.88 10.53	22 10.43 53.66 20.95	15 7.11 36.59 25.42	2 0.95 4.88 7.14	41 19.43
4 Sadists	2 0.95 9.52 10.53	12 5.69 57.14 11.43	6 2.84 28.57 10.17	1 0.47 4.76 3.57	21 9.95
5 Atypical paraphiliacs	2 0.95 5.88 10.53	18 8.53 52.94 17.14	12 5.69 35.29 20.34	2 0.95 5.88 7.14	34 16.11
6 Bisexual pedophiles	1 0.47 10.00 5.26	7 3.32 70.00 6.67	2 0.95 20.00 3.39	0 0.00 0.00 0.00	10 4.74
TOTAL	19 9.00	105 49.76	59 27.96	28 13.27	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY EDUCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	15	35.318	0.002
LIKELIHOOD RATIO CHI-SQUARE	15	35.503	0.002
MANTEL-HAENSZEL CHI-SQUARE	1	6.810	0.009
PHI		0.409	
CONTINGENCY COEFFICIENT		0.379	
CRAMER'S V		0.236	

SAMPLE SIZE = 211
WARNING: 41% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY FSHCAT

GRPCAT(GROUP CATEGORY) FSHCAT(FSH CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average1	Average0	Above average1	TOTAL
Non-pedophiles 0	13 6.16 13.54 52.00	51 24.17 53.13 42.15	32 15.17 33.33 49.23	96 45.50
Pedophiles 1	12 5.69 10.43 48.00	70 33.18 60.87 57.85	33 15.64 28.70 50.77	115 54.50
TOTAL	25 11.85	121 57.35	65 30.81	211 100.00

STATISTICS FOR TABLE OF GRPCAT BY FSHCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	1.339	0.512
LIKELIHOOD RATIO CHI-SQUARE	2	1.338	0.512
MANTEL-HAENSZEL CHI-SQUARE	1	0.031	0.860
PHI		0.080	
CONTINGENCY COEFFICIENT		0.079	
CRAMER'S V		0.080	

SAMPLE SIZE = 211

Appendix N-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY FSHCAT

GRPID(GROUP ID) FSHCAT(FSH CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average$_{-1}$	Average$_0$	Above average$_{+1}$	TOTAL
1 Homosexual pedophiles	7 3.32 10.94 28.00	40 18.96 62.50 33.06	17 8.06 26.56 26.15	64 30.33
2 Heterosexual pedophiles	3 1.42 7.32 12.00	26 12.32 63.41 21.49	12 5.69 29.27 18.46	41 19.43
3 Exhibitionists	4 1.90 9.76 16.00	22 10.43 53.66 18.18	15 7.11 36.59 23.08	41 19.43
4 Sadists	3 1.42 14.29 12.00	14 6.64 66.67 11.57	4 1.90 19.05 6.15	21 9.95
5 Atypical paraphiliacs	6 2.84 17.65 24.00	15 7.11 44.12 12.40	13 6.16 38.24 20.00	34 16.11
6 Bisexual pedophiles	2 0.95 20.00 8.00	4 1.90 40.00 3.31	4 1.90 40.00 6.15	10 4.74
TOTAL	25 11.85	121 57.35	65 30.81	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY FSHCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	7.751	0.653
LIKELIHOOD RATIO CHI-SQUARE	10	7.842	0.644
MANTEL-HAENSZEL CHI-SQUARE	1	0.010	0.919
PHI		0.192	
CONTINGENCY COEFFICIENT		0.188	
CRAMER'S V		0.136	

SAMPLE SIZE = 211
WARNING: 33% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY LHCAT

GRPCAT(GROUP CATEGORY) LHCAT(LH CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average1	average0	Above average1	TOTAL
Non-pedophiles 0	14 6.64 14.58 66.67	46 21.80 47.92 39.66	36 17.06 37.50 48.65	96 45.50
Pedophiles 1	7 3.32 6.09 33.33	70 33.18 60.87 60.34	38 18.01 33.04 51.35	115 54.50
TOTAL	21 9.95	116 54.98	74 35.07	211 100.00

STATISTICS FOR TABLE OF GRPCAT BY LHCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	5.688	0.058
LIKELIHOOD RATIO CHI-SQUARE	2	5.721	0.057
MANTEL-HAENSZEL CHI-SQUARE	1	0.220	0.639
PHI		0.164	
CONTINGENCY COEFFICIENT		0.162	
CRAMER'S V		0.164	

SAMPLE SIZE = 211

Appendix N-4

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY LHCAT

GRPID(GROUP ID) LHCAT(LH CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average-1	average 0	Above average 1	TOTAL
1 Homosexual pedophiles	5 2.37 7.81 23.81	35 16.59 54.69 30.17	24 11.37 37.50 32.43	64 30.33
2 Heterosexual pedophiles	2 0.95 4.88 9.52	29 13.74 70.73 25.00	10 4.74 24.39 13.51	41 19.43
3 Exhibitionists	3 1.42 7.32 14.29	19 9.00 46.34 16.38	19 9.00 46.34 25.68	41 19.43
4 Sadists	5 2.37 23.81 23.81	11 5.21 52.38 9.48	5 2.37 23.81 6.76	21 9.95
5 Atypical paraphiliacs	6 2.84 17.65 28.57	16 7.58 47.06 13.79	12 5.69 35.29 16.22	34 16.11
6 Bisexual pedophiles	0 0.00 0.00 0.00	6 2.84 60.00 5.17	4 1.90 40.00 5.41	10 4.74
TOTAL	21 9.95	116 54.98	74 35.07	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY LHCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	15.334	0.120
LIKELIHOOD RATIO CHI-SQUARE	10	15.110	0.128
MANTEL-HAENSZEL CHI-SQUARE	1	0.431	0.512
PHI		0.270	
CONTINGENCY COEFFICIENT		0.260	
CRAMER'S V		0.191	

SAMPLE SIZE = 211
WARNING: 33% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix N-5

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY TTCAT

GRPCAT(GROUP CATEGORY) TTCAT(TESTOSTERONE CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average 1	Average 0	Above average 1	TOTAL
Non-pedophiles 0	20 9.48 20.83 46.51	31 14.69 32.29 35.63	45 21.33 46.88 55.56	96 45.50
Pedophiles 1	23 10.90 20.00 53.49	56 26.54 48.70 64.37	36 17.06 31.30 44.44	115 54.50
TOTAL	43 20.38	87 41.23	81 38.39	211 100.00

STATISTICS FOR TABLE OF GRPCAT BY TTCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	6.737	0.034
LIKELIHOOD RATIO CHI-SQUARE	2	6.785	0.034
MANTEL-HAENSZEL CHI-SQUARE	1	2.037	0.154
PHI		0.179	
CONTINGENCY COEFFICIENT		0.176	
CRAMER'S V		0.179	

SAMPLE SIZE = 211

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY TTCAT

GRPID(GROUP ID) TTCAT(TESTOSTERONE CATEGORY)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Below average 1	Average 0	Above average 1	TOTAL
1 Homosexual pedophiles	17 8.06 26.56 39.53	28 13.27 43.75 32.18	19 9.00 29.69 23.46	64 30.33
2 Heterosexual pedophiles	5 2.37 12.20 11.63	25 11.85 60.98 28.74	11 5.21 26.83 13.58	41 19.43
3 Exhibitionists	4 1.90 9.76 9.30	10 4.74 24.39 11.49	27 12.80 65.85 33.33	41 19.43
4 Sadists	8 3.79 38.10 18.60	7 3.32 33.33 8.05	6 2.84 28.57 7.41	21 9.95
5 Atypical paraphiliacs	8 3.79 23.53 18.60	14 6.64 41.18 16.09	12 5.69 35.29 14.81	34 16.11
6 Bisexual pedophiles	1 0.47 10.00 2.33	3 1.42 30.00 3.45	6 2.84 60.00 7.41	10 4.74
TOTAL	43 20.38	87 41.23	81 38.39	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY TTCAT

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	28.740	0.001
LIKELIHOOD RATIO CHI-SQUARE	10	27.616	0.002
MANTEL-HAENSZEL CHI-SQUARE	1	1.348	0.246
PHI		0.369	
CONTINGENCY COEFFICIENT		0.346	
CRAMER'S V		0.261	

SAMPLE SIZE = 211
WARNING: 22% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix O-1

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

MMPI_L	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
6	1	7.1	2	14.3
42	1	7.1	3	21.4
44	3	21.4	6	42.9
46	1	7.1	7	50.0
47	2	14.3	9	64.3
50	3	21.4	12	85.7
53	1	7.1	13	92.9
57	1	7.1	14	100.0
63				

MMPI_F	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
4	1	7.1	2	14.3
48	1	7.1	3	21.4
50	1	7.1	4	28.6
53	2	14.3	6	42.9
55	2	14.3	8	57.1
58	2	14.3	10	71.4
62	1	7.1	11	78.6
67	1	7.1	12	85.7
69	2	14.3	14	100.0
99				

MMPI_K	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
22	1	7.1	2	14.3
39	1	7.1	3	21.4
44	1	7.1	4	28.6
47	3	21.4	5	50.0
49	1	7.1	7	57.1
53	1	7.1	8	64.3
58	1	7.1	9	71.4
60	1	7.1	10	78.6
61	1	7.1	11	85.7
62	1	7.1	12	92.9
64	1	7.1	13	100.0
68			14	

MMPI_1	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
0	1	7.1	2	14.3
47	1	7.1	3	21.4
49	2	14.3	5	35.7
52	1	7.1	6	42.9
54	2	14.3	8	57.1
59	1	7.1	9	64.3
60	1	7.1	10	71.4
62	1	7.1	11	78.6
67	1	7.1	12	85.7
70	1	7.1	13	92.9
77	1	7.1	14	100.0
88				

MMPI_2	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
18	1	7.1	4	28.6
53	3	21.4	5	35.7
56	1	7.1	6	42.9
60	1	7.1	7	50.0
63	1	7.1	10	71.4
70	3	21.4	11	78.6
71	1	7.1	12	85.7
72	1	7.1	13	92.9
82	1	7.1	14	100.0
92				

MMPI_3	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
22	1	7.1	2	14.3
49	1	7.1	3	21.4
51	2	14.3	5	35.7
55	1	7.1	6	42.9
56	2	14.3	8	57.1
69	2	14.3	10	71.4
71	1	7.1	11	78.6
73	2	14.3	13	92.9
78	1	7.1	14	100.0
80				

MMPI_4	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	1	7.1
23	1	7.1	2	14.3
50	1	7.1	3	21.4
61	1	7.1	4	28.6
62	1	7.1	5	35.7
71	3	21.4	8	57.1
76	3	21.4	11	78.6
81	1	7.1	12	85.7
83	1	7.1	13	92.9
91	1	7.1	14	100.0
97				

MMPI_5	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
31	1	7.1	1	7.1
45	1	7.1	2	14.3
47	1	7.1	3	21.4
53	1	7.1	4	28.6
55	1	7.1	5	35.7
65	3	21.4	8	57.1
67	1	7.1	9	64.3
73	1	7.1	10	71.4
79	1	7.1	11	78.6
84	1	7.1	12	85.7
86	1	7.1	13	92.9
94	1	7.1	14	100.0

MMPI_6	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
11	1	7.1	1	7.1
39	1	7.1	2	14.3
47	1	7.1	3	21.4
53	2	14.3	5	35.7
55	1	7.1	6	42.9
61	1	7.1	7	50.0
62	1	7.1	8	57.1
63	1	7.1	9	64.3
69	1	7.1	10	71.4
67	1	7.1	11	78.6
70	1	7.1	12	85.7
76	1	7.1	13	92.9
84	1	7.1	14	100.0

MMPI_7	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
24	1	7.1	1	7.1
39	1	7.1	2	14.3
46	1	7.1	3	21.4
48	1	7.1	4	28.6
56	1	7.1	5	35.7
58	1	7.1	6	42.9
64	1	7.1	7	50.0
66	1	7.1	8	57.1
69	1	7.1	9	64.3
71	1	7.1	10	71.4
74	1	7.1	11	78.6
79	1	7.1	12	85.7
85	2	14.3	14	100.0

MMPI_8	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
27	1	7.1	1	7.1
43	1	7.1	2	14.3
52	1	7.1	3	21.4
55	1	7.1	4	28.6
59	1	7.1	5	35.7
61	2	14.3	7	50.0
69	1	7.1	8	57.1
73	1	7.1	9	64.3
74	1	7.1	10	71.4
81	1	7.1	11	78.6
88	2	14.3	13	92.9
99	1	7.1	14	100.0

MMPI_9	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
22	1	7.1	1	7.1
42	1	7.1	2	14.3
45	1	7.1	3	21.4
47	1	7.1	4	28.6
52	1	7.1	5	35.7
60	3	21.4	8	57.1
63	1	7.1	9	64.3
65	1	7.1	10	71.4
68	1	7.1	11	78.6
70	1	7.1	12	85.7
73	1	7.1	13	92.9
78	1	7.1	14	100.0

MMPI_0	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
.	197	.	.	.
19	1	7.1	1	7.1
43	1	7.1	2	14.3
45	1	7.1	3	21.4
48	1	7.1	4	28.6
50	1	7.1	5	35.7
51	1	7.1	6	42.9
53	1	7.1	7	50.0
56	1	7.1	8	57.1
60	2	14.3	10	71.4
63	1	7.1	11	78.6
65	1	7.1	12	85.7
66	1	7.1	13	92.9
92	1	7.1	14	100.0

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

STEPWISE DISCRIMINANT ANALYSIS

14 OBSERVATIONS 10 VARIABLE(S) IN THE ANALYSIS
9 CLASS LEVELS 0 VARIABLE(S) WILL BE INCLUDED

THE METHOD(S) FOR SELECTING VARIABLES WILL BE:
STEPWISE

SIGNIFICANCE LEVEL TO ENTER = 0.1500
SIGNIFICANCE LEVEL TO STAY = 0.1500

CLASS LEVEL INFORMATION FOR GROUP ID

GRPID	GROU	FREQUENCY	PROPORTION
1	2	2	0.142857
2	3	5	0.357143
3	4	3	0.214286
4	5	3	0.214286
5	1	1	0.071429

TOTAL SAMPLE CORRELATIONS

	MMPI_1	MMPI_2	MMPI_3	MMPI_4	MMPI_5	MMPI_6	MMPI_7	MMPI_8	MMPI_9	MMPI_0
MMPI_1	1.000	0.632	0.890	0.621	0.396	0.889	0.691	0.737	0.564	0.636
MMPI_2	0.632	1.000	0.595	0.618	0.715	0.592	0.762	0.611	0.281	0.725
MMPI_3	0.890	0.595	1.000	0.655	0.433	0.788	0.613	0.637	0.459	0.414
MMPI_4	0.621	0.618	0.655	1.000	0.288	0.641	0.677	0.603	0.347	0.347
MMPI_5	0.396	0.715	0.433	0.288	1.000	0.775	0.677	0.583	0.603	0.264
MMPI_6	0.889	0.592	0.788	0.641	0.775	1.000	0.734	0.967	0.576	0.510
MMPI_7	0.691	0.762	0.613	0.677	0.677	0.734	1.000	0.947	0.576	0.625
MMPI_8	0.737	0.611	0.637	0.603	0.583	0.967	0.947	1.000	0.576	0.603
MMPI_9	0.564	0.281	0.459	0.347	0.603	0.576	0.625	0.603	1.000	0.440
MMPI_0	0.636	0.725	0.414	0.347	0.264	0.510	0.625	0.603	0.440	1.000

POOLED WITHIN CLASS CORRELATIONS

	MMPI_1	MMPI_2	MMPI_3	MMPI_4	MMPI_5	MMPI_6	MMPI_7	MMPI_8	MMPI_9	MMPI_0
MMPI_1	1.000	0.674	0.940	0.704	0.539	0.891	0.721	0.762	0.453	0.262
MMPI_2	0.674	1.000	0.571	0.554	0.819	0.646	0.678	0.632	0.222	0.615
MMPI_3	0.940	0.571	1.000	0.650	0.563	0.749	0.589	0.620	0.459	0.393
MMPI_4	0.704	0.554	1.000	1.000	0.389	0.744	0.630	0.643	0.347	0.194
MMPI_5	0.539	0.819	0.563	0.389	1.000	0.783	0.743	0.774	0.603	0.264
MMPI_6	0.891	0.646	0.749	0.744	0.783	1.000	0.743	0.974	0.576	0.510
MMPI_7	0.721	0.678	0.589	0.630	0.743	0.743	1.000	0.947	0.576	0.625
MMPI_8	0.762	0.632	0.620	0.643	0.774	0.974	0.947	1.000	0.576	0.603
MMPI_9	0.453	0.222	0.459	0.347	0.603	0.576	0.625	0.603	1.000	0.440
MMPI_0	0.262	0.615	0.393	0.194	0.264	0.510	0.625	0.603	0.440	1.000

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

STATISTICS FOR ENTRY, DF = 4, 9

VARIABLE	R**2	F	PROB > F	TOLERANCE
MMPI_1	0.5454	2.699	0.0995	1.0000
MMPI_2	0.3515	1.220	0.3677	1.0000
MMPI_3	0.3320	1.118	0.4058	1.0000
MMPI_4	0.1282	0.331	0.8505	1.0000
MMPI_5	0.0204	0.047	0.9951	1.0000
MMPI_6	0.3284	1.100	0.4131	1.0000
MMPI_7	0.2412	0.715	0.6022	1.0000
MMPI_8	0.2895	0.917	0.4947	1.0000
MMPI_9	0.2397	0.709	0.6056	1.0000
MMPI_0	0.5639	2.909	0.0845	1.0000

VARIABLE MMPI_0 WILL BE ENTERED

THE FOLLOWING VARIABLE(S) HAVE BEEN ENTERED:
MMPI_0

MULTIVARIATE STATISTICS

WILKS' LAMBDA = 0.43614384 F(4,9) = 2.909 PROB > F = 0.0845
PILLAI'S TRACE = 0.563856 F(4,9) = 2.909 PROB > F = 0.0845

AVERAGE SQUARED CANONICAL CORRELATION = 0.14096404

STATISTICS FOR REMOVAL, DF = 4, 9

VARIABLE	R**2	F	PROB > F
MMPI_0	0.5639	2.909	0.0845

NO VARIABLES CAN BE REMOVED

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

STEPWISE SELECTION: STEP 2

STATISTICS FOR ENTRY, DF = 4, 8

VARIABLE	PARTIAL RWW2	F	PROB > F	TOLERANCE
MMPI_1	0.3070	0.886	0.5138	0.5703
MMPI_2	0.1444	0.338	0.8455	0.4730
MMPI_3	0.2006	0.502	0.7361	0.8288
MMPI_4	0.0595	0.127	0.9686	0.7010
MMPI_5	0.0647	0.138	0.9633	0.9280
MMPI_6	0.2217	0.570	0.6925	0.7399
MMPI_7	0.0766	0.166	0.9498	0.6097
MMPI_8	0.1838	0.451	0.7700	0.6365
MMPI_9	0.1046	0.254	0.9117	0.8060

NO VARIABLES CAN BE ENTERED

NO FURTHER STEPS ARE POSSIBLE

STEPWISE SELECTION: SUMMARY

STEP	VARIABLE ENTERED	VARIABLE REMOVED	NUMBER IN	PARTIAL RWW2	F STATISTIC	PROB > F	WILKS' LAMBDA	PROB < LAMBDA	AVERAGE SQUARED CANONICAL CORRELATION	PROB > ASCC
1	MMPI_0		1	0.5639	2.909	0.0845	0.43614384	0.0845	0.14096404	0.0845

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

STEPWISE DISCRIMINANT ANALYSIS

14 OBSERVATIONS — 10 VARIABLE(S) IN THE ANALYSIS
2 CLASS LEVELS — 0 VARIABLE(S) WILL BE INCLUDED

THE METHOD(S) FOR SELECTING VARIABLES WILL BE:
STEPWISE

SIGNIFICANCE LEVEL TO ENTER = 0.1500
SIGNIFICANCE LEVEL TO STAY = 0.1500

CLASS LEVEL INFORMATION FOR GROUP CATEGORY

GRPCAT	GROU	FREQUENCY	PROPORTION
	0	7	0.500000
	1	7	0.500000

TOTAL SAMPLE CORRELATIONS

	MMPI_1	MMPI_2	MMPI_3	MMPI_4	MMPI_5	MMPI_6	MMPI_7	MMPI_8	MMPI_9	MMPI_0
MMPI_1	1.000	0.632	0.890	0.621	0.396	0.809	0.691	0.757	0.544	0.656
MMPI_2	0.632	1.000	0.595	0.618	0.713	0.582	0.742	0.611	0.291	0.726
MMPI_3	0.890	0.595	1.000	0.635	0.433	0.788	0.615	0.607	0.459	0.414
MMPI_4	0.621	0.618	0.635	1.000	0.558	0.775	0.672	0.608	0.660	0.547
MMPI_5	0.396	0.713	0.433	0.558	1.000	0.641	0.677	0.583	0.286	0.268
MMPI_6	0.809	0.582	0.788	0.775	0.641	1.000	0.734	0.777	0.592	0.510
MMPI_7	0.691	0.742	0.615	0.672	0.677	0.734	1.000	0.947	0.501	0.625
MMPI_8	0.757	0.611	0.607	0.608	0.583	0.777	0.947	1.000	0.576	0.603
MMPI_9	0.544	0.291	0.459	0.660	0.286	0.592	0.501	0.576	1.000	0.440
MMPI_0	0.656	0.726	0.414	0.547	0.268	0.510	0.625	0.603	0.440	1.000

POOLED WITHIN CLASS CORRELATIONS

	MMPI_1	MMPI_2	MMPI_3	MMPI_4	MMPI_5	MMPI_6	MMPI_7	MMPI_8	MMPI_9	MMPI_0
MMPI_1	1.000	0.613	0.944	0.643	0.378	0.813	0.668	0.723	0.476	0.616
MMPI_2	0.613	1.000	0.607	0.622	0.707	0.570	0.730	0.593	0.237	0.714
MMPI_3	0.944	0.607	1.000	0.656	0.437	0.798	0.635	0.662	0.505	0.437
MMPI_4	0.643	0.622	0.656	1.000	0.557	0.778	0.682	0.643	0.703	0.562
MMPI_5	0.378	0.707	0.437	0.557	1.000	0.634	0.671	0.583	0.257	0.242
MMPI_6	0.813	0.570	0.798	0.778	0.634	1.000	0.727	0.789	0.588	0.493
MMPI_7	0.668	0.730	0.635	0.682	0.671	0.727	1.000	0.955	0.494	0.596
MMPI_8	0.723	0.593	0.662	0.643	0.583	0.789	0.955	1.000	0.495	0.550
MMPI_9	0.476	0.237	0.505	0.703	0.257	0.588	0.494	0.495	1.000	0.361
MMPI_0	0.616	0.714	0.437	0.562	0.242	0.493	0.596	0.550	0.361	1.000

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

STEP 1

STATISTICS FOR ENTRY, DF = 1, 12

VARIABLE	R**2	F	PROB > F	TOLERANCE
MMPI_1	0.1075	1.446	0.2524	1.0000
MMPI_2	0.0373	0.465	0.5082	1.0000
MMPI_3	0.0000	0.000	0.9873	1.0000
MMPI_4	0.0019	0.023	0.8818	1.0000
MMPI_5	0.0170	0.208	0.6566	1.0000
MMPI_6	0.0227	0.279	0.6069	1.0000
MMPI_7	0.0584	0.744	0.4053	1.0000
MMPI_8	0.1527	2.162	0.1672	1.0000
MMPI_9	0.1656	2.382	0.1487	1.0000
MMPI_0	0.0969	1.288	0.2787	1.0000

VARIABLE MMPI_9 WILL BE ENTERED

THE FOLLOWING VARIABLE(S) HAVE BEEN ENTERED:
MMPI_9

MULTIVARIATE STATISTICS

WILKS' LAMBDA = 0.83437255 F(1,12) = 2.382 PROB > F = 0.1487
PILLAI'S TRACE = 0.165627 F(1,12) = 2.382 PROB > F = 0.1487

AVERAGE SQUARED CANONICAL CORRELATION = 0.16562745

STEP 2

STATISTICS FOR REMOVAL, DF = 1, 12

VARIABLE	R**2	F	PROB > F
MMPI_9	0.1656	2.382	0.1487

NO VARIABLES CAN BE REMOVED

ANALYSIS WITH UNKNOWN CODED AS MISSING
DISCRIMINANT ANALYSIS OF MMPI

EPWISE SELECTION: STEP 2

STATISTICS FOR ENTRY, DF = 1, 11

VARIABLE	PARTIAL RHH2	F	PROB > F	TOLERANCE
MMPI_1	0.0193	0.217	0.6505	0.7042
MMPI_2	0.0073	0.081	0.7811	0.9154
MMPI_3	0.0557	0.648	0.4378	0.7894
MMPI_4	0.1072	1.320	0.2749	0.5647
MMPI_5	0.0003	0.003	0.9582	0.9183
MMPI_6	0.0150	0.168	0.6899	0.6493
MMPI_7	0.0023	0.025	0.8767	0.7493
MMPI_8	0.0439	0.505	0.4921	0.6687
MMPI_0	0.0259	0.293	0.5992	0.8060

NO VARIABLES CAN BE ENTERED

FURTHER STEPS ARE POSSIBLE

EPWISE SELECTION: SUMMARY

STEP	VARIABLE ENTERED	VARIABLE REMOVED	NUMBER IN	PARTIAL RHH2	F STATISTIC	PROB > F	WILKS' LAMBDA	PROB < LAMBDA	AVERAGE SQUARED CANONICAL CORRELATION	PROB > ASCC
1	MMPI_9		1	0.1656	2.382	0.1487	0.83437255	0.1487	0.16562745	0.1487

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY PED_REL

GRPCAT(GROUP CATEGORY) PED_REL(PEDOFILE RELATIVE)

FREQUENCY / PERCENT / ROW PCT / COL PCT	No 1	Maybe 2	Yes 3	TOTAL
Non-pedophiles 0	74	2	8	84
	41.81	1.13	4.52	47.46
	88.10	2.38	9.52	
	48.37	50.00	40.00	
Pedophiles 1	79	2	12	93
	44.63	1.13	6.78	52.54
	84.95	2.15	12.90	
	51.63	50.00	60.00	
TOTAL	153	4	20	177
	86.44	2.26	11.30	100.00

FREQUENCY MISSING = 34

STATISTICS FOR TABLE OF GRPCAT BY PED_REL

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	0.507	0.776
LIKELIHOOD RATIO CHI-SQUARE	2	0.511	0.775
MANTEL-HAENSZEL CHI-SQUARE	1	0.453	0.501
PHI		0.054	
CONTINGENCY COEFFICIENT		0.053	
CRAMER'S V		0.054	

EFFECTIVE SAMPLE SIZE = 177
FREQUENCY MISSING = 34
WARNING: 16% OF THE DATA ARE MISSING.
WARNING: 33% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY PED_REL

GRPID(GROUP ID) PED_REL(PEDOFILE RELATIVE)

FREQUENCY / PERCENT / ROW PCT / COL PCT	No 1	Maybe 2	Yes 3	TOTAL
1 Homosexual pedophiles	43 24.29 89.58 28.10	2 1.13 4.17 50.00	3 1.69 6.25 15.00	48 27.12
2 Heterosexual pedophiles	30 16.95 78.95 19.61	0 0.00 0.00 0.00	8 4.52 21.05 40.00	38 21.47
3 Exhibitionists	31 17.51 83.78 20.26	1 0.56 2.70 25.00	5 2.82 13.51 25.00	37 20.90
4 Sadists	17 9.60 89.47 11.11	0 0.00 0.00 0.00	2 1.13 10.53 10.00	19 10.73
5 Atypical paraphiliacs	26 14.69 92.86 16.99	1 0.56 3.57 25.00	1 0.56 3.57 5.00	28 15.82
6 Bisexual pedophiles	6 3.39 85.71 3.92	0 0.00 0.00 0.00	1 0.56 14.29 5.00	7 3.95
TOTAL	153 86.44	4 2.26	20 11.30	177 100.00

FREQUENCY MISSING = 34

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY PED_REL

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	8.938	0.538
LIKELIHOOD RATIO CHI-SQUARE	10	10.285	0.416
MANTEL-HAENSZEL CHI-SQUARE	1	0.249	0.618
PHI		0.225	
CONTINGENCY COEFFICIENT		0.219	
CRAMER'S V		0.159	

EFFECTIVE SAMPLE SIZE = 177
FREQUENCY MISSING = 34
WARNING: 16% OF THE DATA ARE MISSING.
WARNING: 61% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY REL_FATH

GRPCAT(GROUP CATEGORY) REL_FATH(RELATIONSHIP TO FATHER)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Positive 1	Somewhat negative 2	Negative 3	TOTAL
Non-pedophiles 0	14 7.49 16.28 36.84	21 11.23 24.42 45.65	51 27.27 59.30 49.51	86 45.99
Pedophiles 1	24 12.83 23.76 63.16	25 13.37 24.75 54.35	52 27.81 51.49 50.49	101 54.01
TOTAL	38 20.32	46 24.60	103 55.08	187 100.00

FREQUENCY MISSING = 24

STATISTICS FOR TABLE OF GRPCAT BY REL_FATH

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	1.797	0.407
LIKELIHOOD RATIO CHI-SQUARE	2	1.816	0.403
MANTEL-HAENSZEL CHI-SQUARE	1	1.708	0.191
PHI		0.098	
CONTINGENCY COEFFICIENT		0.098	
CRAMER'S V		0.098	

EFFECTIVE SAMPLE SIZE = 187
FREQUENCY MISSING = 24
WARNING: 11% OF THE DATA ARE MISSING.

Appendix Q-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY REL_FATH

GRPID(GROUP ID) REL_FATH(RELATIONSHIP TO FATHER)

GRPID	Positive 1	Somewhat negative 2	Negative 3	TOTAL
1 Homosexual pedophiles	15 8.02 28.30 39.47	16 8.56 30.19 34.78	22 11.76 41.51 21.36	53 28.34
2 Heterosexual pedophiles	7 3.74 17.50 18.42	9 4.81 22.50 19.57	24 12.83 60.00 23.30	40 21.39
3 Exhibitionists	10 5.35 25.64 26.32	9 4.81 23.08 19.57	20 10.70 51.28 19.42	39 20.86
4 Sadists	3 1.60 16.67 7.89	4 2.14 22.22 8.70	11 5.88 61.11 10.68	18 9.63
5 Atypical paraphiliacs	1 0.53 3.45 2.63	8 4.28 27.59 17.39	20 10.70 68.97 19.42	29 15.51
6 Bisexual pedophiles	2 1.07 25.00 5.26	0 0.00 0.00 0.00	6 3.21 75.00 5.83	8 4.28
TOTAL	38 20.32	46 24.60	103 55.08	187 100.00

FREQUENCY MISSING = 24

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY REL_FATH

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	13.285	0.208
LIKELIHOOD RATIO CHI-SQUARE	10	17.193	0.070
MANTEL-HAENSZEL CHI-SQUARE	1	6.499	0.011
PHI		0.267	
CONTINGENCY COEFFICIENT		0.258	
CRAMER'S V		0.188	

EFFECTIVE SAMPLE SIZE = 187
FREQUENCY MISSING = 24
WARNING: 11% OF THE DATA ARE MISSING.
WARNING: 27% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY REL_MOTH

GRPCAT(GROUP CATEGORY) REL_MOTH(RELATIONSHIP TO MOTHER)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Positive 1	Somewhat negative 2	Negative 3	TOTAL
0 Non-pedophiles	26	26	19	71
	17.45	17.45	12.75	47.65
	36.62	36.62	26.76	
	38.81	60.47	48.72	
1 Pedophiles	41	17	20	78
	27.52	11.41	13.42	52.35
	52.56	21.79	25.64	
	61.19	39.53	51.28	
TOTAL	67	43	39	149
	44.97	28.86	26.17	100.00

FREQUENCY MISSING = 62

STATISTICS FOR TABLE OF GRPCAT BY REL_MOTH

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	4.950	0.084
LIKELIHOOD RATIO CHI-SQUARE	2	4.981	0.083
MANTEL-HAENSZEL CHI-SQUARE	1	1.590	0.207
PHI		0.182	
CONTINGENCY COEFFICIENT		0.179	
CRAMER'S V		0.182	

EFFECTIVE SAMPLE SIZE = 149
FREQUENCY MISSING = 62
WARNING: 29% OF THE DATA ARE MISSING.

Appendix R-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY REL_MOTH

GRPID(GROUP ID) REL_MOTH(RELATIONSHIP TO MOTHER)

FREQUENCY / PERCENT / ROW PCT / COL PCT	Positive 1	Somewhat negative 2	Negative 3	TOTAL
1 Homosexual pedophiles	22 14.77 59.46 32.84	8 5.37 21.62 18.60	7 4.70 18.92 17.95	37 24.83
2 Heterosexual pedophiles	17 11.41 50.00 25.37	7 4.70 20.59 16.28	10 6.71 29.41 25.64	34 22.82
3 Exhibitionists	10 6.71 31.25 14.93	14 9.40 43.75 32.56	8 5.37 25.00 20.51	32 21.48
4 Sadists	4 2.68 26.67 5.97	6 4.03 40.00 13.95	5 3.36 33.33 12.82	15 10.07
5 Atypical paraphiliacs	12 8.05 50.00 17.91	6 4.03 25.00 13.95	6 4.03 25.00 15.38	24 16.11
6 Bisexual pedophiles	2 1.34 28.57 2.99	2 1.34 28.57 4.65	3 2.01 42.86 7.69	7 4.70
TOTAL	67 44.97	43 28.86	39 26.17	149 100.00

FREQUENCY MISSING = 62

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY REL_MOTH

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	11.583	0.314
LIKELIHOOD RATIO CHI-SQUARE	10	11.510	0.319
MANTEL-HAENSZEL CHI-SQUARE	1	2.502	0.114
PHI		0.279	
CONTINGENCY COEFFICIENT		0.269	
CRAMER'S V		0.197	

EFFECTIVE SAMPLE SIZE = 149
FREQUENCY MISSING = 62
WARNING: 29% OF THE DATA ARE MISSING.
WARNING: 27% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY LOSSES

GRPCAT(GROUP CATEGORY)
LOSSES

		No 1	Yes 2	TOTAL
Non-pedophiles	0	48	41	89
		25.13	21.47	46.60
		53.93	46.07	
		46.15	47.13	
Pedophiles	1	56	46	102
		29.32	24.08	53.40
		54.90	45.10	
		53.85	52.87	
TOTAL		104	87	191
		54.45	45.55	100.00

FREQUENCY MISSING = 20

STATISTICS FOR TABLE OF GRPCAT BY LOSSES

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	1	0.018	0.893
LIKELIHOOD RATIO CHI-SQUARE	1	0.018	0.893
CONTINUITY ADJ. CHI-SQUARE	1	0.000	1.000
MANTEL-HAENSZEL CHI-SQUARE	1	0.018	0.894
FISHER'S EXACT TEST (1-TAIL)			0.504
(2-TAIL)			1.000
PHI		-0.010	
CONTINGENCY COEFFICIENT		0.010	
CRAMER'S V		-0.010	

EFFECTIVE SAMPLE SIZE = 191
FREQUENCY MISSING = 20

Appendix S-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY LOSSES

GRPID(GROUP ID) LOSSES

FREQUENCY / PERCENT / ROW PCT / COL PCT	No 1	Yes 2	TOTAL
1 Homosexual pedophiles	35 18.32 67.31 53.65	17 8.90 32.69 19.54	52 27.23
2 Heterosexual pedophiles	20 10.47 50.00 19.23	20 10.47 50.00 22.99	40 20.94
3 Exhibitionists	21 10.99 52.50 20.19	19 9.95 47.50 21.84	40 20.94
4 Sadists	9 4.71 56.25 8.65	7 3.66 43.75 8.05	16 8.38
5 Atypical paraphiliacs	18 9.42 54.55 17.31	15 7.85 45.45 17.24	33 17.28
6 Bisexual pedophiles	1 0.52 10.00 0.96	9 4.71 90.00 10.34	10 5.24
TOTAL	104 54.45	87 45.55	191 100.00

FREQUENCY MISSING = 20

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY LOSSES

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	11.834	0.037
LIKELIHOOD RATIO CHI-SQUARE	5	12.832	0.025
MANTEL-HAENSZEL CHI-SQUARE	1	5.040	0.025
PHI		0.249	
CONTINGENCY COEFFICIENT		0.242	
CRAMER'S V		0.249	

EFFECTIVE SAMPLE SIZE = 191
FREQUENCY MISSING = 20

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY SEX_INV

GRPCAT(GROUP CATEGORY) SEX_INV(NO. OF CHILDHOOD SEXUAL INVOLVEMENTS)

FREQUENCY / PERCENT / ROW PCT / COL PCT	None 1	A few 2	Many 3	TOTAL
0 Non-pedophiles	63 34.81 77.78 48.46	11 6.08 13.58 34.38	7 3.87 8.64 36.84	81 44.75
1 Pedophiles	67 37.02 67.00 51.54	21 11.60 21.00 65.63	12 6.63 12.00 63.16	100 55.25
TOTAL	130 71.82	32 17.68	19 10.50	181 100.00

FREQUENCY MISSING = 30

STATISTICS FOR TABLE OF GRPCAT BY SEX_INV

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	2	2.598	0.273
LIKELIHOOD RATIO CHI-SQUARE	2	2.634	0.268
MANTEL-HAENSZEL CHI-SQUARE	1	1.989	0.158
PHI		0.120	
CONTINGENCY COEFFICIENT		0.119	
CRAMER'S V		0.120	

EFFECTIVE SAMPLE SIZE = 181
FREQUENCY MISSING = 30
WARNING: 14% OF THE DATA ARE MISSING.

Appendix T-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY SEX_INV

GRPID(GROUP ID) SEX_INV(NO. OF CHILDHOOD SEXUAL INVOLVEMENTS)

FREQUENCY / PERCENT / ROW PCT / COL PCT	None 1	A few 2	Many 3	TOTAL
1 Homosexual pedophiles	36 19.89 66.67 27.69	12 6.63 22.22 37.50	6 3.31 11.11 31.58	54 29.83
2 Heterosexual pedophiles	28 15.47 71.79 21.54	8 4.42 20.51 25.00	3 1.66 7.69 15.79	39 21.55
3 Exhibitionists	25 13.81 71.43 19.23	6 3.31 17.14 18.75	4 2.21 11.43 21.05	35 19.34
4 Sadists	15 8.29 78.95 11.54	2 1.10 10.53 6.25	2 1.10 10.53 10.53	19 10.50
5 Atypical paraphiliacs	23 12.71 85.19 17.69	3 1.66 11.11 9.38	1 0.55 3.70 5.26	27 14.92
6 Bisexual pedophiles	3 1.66 42.86 2.31	1 0.55 14.29 3.13	3 1.66 42.86 15.79	7 3.87
TOTAL	130 71.82	32 17.68	19 10.50	181 100.00

FREQUENCY MISSING = 30

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY SEX_INV

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	10	12.402	0.259
LIKELIHOOD RATIO CHI-SQUARE	10	10.000	0.440
MANTEL-HAENSZEL CHI-SQUARE	1	0.105	0.746
PHI		0.262	
CONTINGENCY COEFFICIENT		0.253	
CRAMER'S V		0.185	

EFFECTIVE SAMPLE SIZE = 181
FREQUENCY MISSING = 30
WARNING: 14% OF THE DATA ARE MISSING.
WARNING: 44% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY AGE_SEX

GRPID(GROUP ID) AGE_SEX(AGE OF CHILDHOOD SEXUAL INVOLVEMENTS)

FREQUENCY / PERCENT / ROW PCT / COL PCT	3	5	6	7	8	9	10	11	12	13	14	TOTAL
1	2 4.35 11.76 66.67	0 0.00 0.00 0.00	2 4.35 11.76 25.00	3 6.52 17.65 50.00	1 2.17 5.88 25.00	2 4.35 11.76 33.33	1 2.17 5.88 50.00	0 0.00 0.00 0.00	2 4.35 11.76 40.00	3 6.52 17.65 60.00	1 2.17 5.88 50.00	17 36.96
2	0 0.00 0.00 0.00	2 4.35 22.22 66.67	4 8.70 44.44 50.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 2.17 11.11 16.67	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 2.17 11.11 20.00	1 2.17 11.11 20.00	0 0.00 0.00 0.00	9 19.57
3	0 0.00 0.00 0.00	1 2.17 9.09 33.33	2 4.35 18.18 25.00	1 2.17 9.09 16.67	2 4.35 18.18 50.00	2 4.35 18.18 33.33	1 2.17 9.09 50.00	0 0.00 0.00 0.00	2 4.35 18.18 40.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 23.91
4	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 2.17 50.00 16.67	1 2.17 50.00 25.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 4.35
5	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 4.35 66.67 100.00	0 0.00 0.00 0.00	1 2.17 33.33 20.00	0 0.00 0.00 0.00	3 6.52
6	1 2.17 25.00 33.33	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 2.17 25.00 16.67	0 0.00 0.00 0.00	1 2.17 25.00 16.67	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 2.17 25.00 50.00	4 8.70
TOTAL	3 6.52	3 6.52	8 17.39	6 13.04	4 8.70	6 13.04	2 4.35	2 4.35	8 17.39	5 10.87	2 4.35	46 100.00

FREQUENCY MISSING = 165

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY AGE_SEX

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	50	68.496	0.042
LIKELIHOOD RATIO CHI-SQUARE	50	54.093	0.321
MANTEL-HAENSZEL CHI-SQUARE	1	0.081	0.776
PHI		1.220	
CONTINGENCY COEFFICIENT		0.773	
CRAMER'S V		0.546	

EFFECTIVE SAMPLE SIZE = 46
FREQUENCY MISSING = 165
WARNING: 78% OF THE DATA ARE MISSING.
WARNING: 100% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix U-1

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY VIOLENCE

GRPCAT(GROUP CATEGORY)
VIOLENCE

FREQUENCY / PERCENT / ROW PCT / COL PCT	Yes 1	No 2	TOTAL
0 Non-pedophiles	27	65	92
	13.50	32.50	46.00
	29.35	70.65	
	81.82	38.92	
1 Pedophiles	6	102	108
	3.00	51.00	54.00
	5.56	94.44	
	18.18	61.08	
TOTAL	33	167	200
	16.50	83.50	100.00

FREQUENCY MISSING = 11

STATISTICS FOR TABLE OF GRPCAT BY VIOLENCE

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	1	20.412	0.000
LIKELIHOOD RATIO CHI-SQUARE	1	21.439	0.000
CONTINUITY ADJ. CHI-SQUARE	1	18.722	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	20.310	0.000
FISHER'S EXACT TEST (1-TAIL)			0.000
(2-TAIL)			0.000
PHI		0.319	
CONTINGENCY COEFFICIENT		0.304	
CRAMER'S V		0.319	

EFFECTIVE SAMPLE SIZE = 200
FREQUENCY MISSING = 11

Appendix U-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY VIOLENCE

GRPID(GROUP ID) VIOLENCE

FREQUENCY / PERCENT / ROW PCT / COL PCT	Yes 1	No 2	TOTAL
1 Nomosexual pedophiles	1 0.50 1.75 3.03	56 28.00 98.25 33.53	57 28.50
2 Heterosexual pedophiles	5 2.50 12.20 15.15	36 18.00 87.80 21.56	41 20.50
3 Exhibitionists	1 0.50 2.56 3.03	38 19.00 97.44 22.75	39 19.50
4 Sadists	19 9.50 90.48 57.58	2 1.00 9.52 1.20	21 10.50
5 Atypical paraphiliacs	7 3.50 21.88 21.21	25 12.50 78.13 14.97	32 16.00
6 Bisexual pedophiles	0 0.00 0.00 0.00	10 5.00 100.00 5.99	10 5.00
TOTAL	33 16.50	167 83.50	200 100.00

FREQUENCY MISSING = 11

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY VIOLENCE

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	101.104	0.000
LIKELIHOOD RATIO CHI-SQUARE	5	82.543	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	15.350	0.000
PHI		0.711	
CONTINGENCY COEFFICIENT		0.579	
CRAMER'S V		0.711	

EFFECTIVE SAMPLE SIZE = 200
FREQUENCY MISSING = 11

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPCAT BY INCEST

GRPCAT(GROUP CATEGORY)
INCEST

FREQUENCY PERCENT ROW PCT COL PCT		No 1	Yes 2	TOTAL
Non-pedophiles	0	95 45.02 98.96 48.72	1 0.47 1.04 6.25	96 45.50
Pedophiles	1	100 47.39 86.96 51.28	15 7.11 13.04 93.75	115 54.50
TOTAL		195 92.42	16 7.58	211 100.00

STATISTICS FOR TABLE OF GRPCAT BY INCEST

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	1	10.755	0.001
LIKELIHOOD RATIO CHI-SQUARE	1	13.114	0.000
CONTINUITY ADJ. CHI-SQUARE	1	9.110	0.003
MANTEL-HAENSZEL CHI-SQUARE	1	10.704	0.001
FISHER'S EXACT TEST (1-TAIL)			0.001
(2-TAIL)			0.001
PHI		0.226	
CONTINGENCY COEFFICIENT		0.220	
CRAMER'S V		0.226	

SAMPLE SIZE = 211

Appendix V-2

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

TABLE OF GRPID BY INCEST

GRPID(GROUP ID) INCEST

FREQUENCY / PERCENT / ROW PCT / COL PCT	No 1	Yes 2	TOTAL
1 Homosexual pedophile	61 28.91 95.31 31.28	3 1.42 4.69 18.75	64 30.33
2 Heterosexual pedophile	29 13.74 70.73 14.87	12 5.69 29.27 75.00	41 19.43
3 Exhibitionists	40 18.96 97.56 20.51	1 0.47 2.44 6.25	41 19.43
4 Sadists	21 9.95 100.00 10.77	0 0.00 0.00 0.00	21 9.95
5 Atypical paraphilia	34 16.11 100.00 17.44	0 0.00 0.00 0.00	34 16.11
6 Bisexual pedophilia	10 4.74 100.00 5.13	0 0.00 0.00 0.00	10 4.74
TOTAL	195 92.42	16 7.58	211 100.00

ANALYSIS WITH UNKNOWNS CODED AS MISSING
FREQUENCIES AND CROSSTABULATIONS

STATISTICS FOR TABLE OF GRPID BY INCEST

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	35.159	0.000
LIKELIHOOD RATIO CHI-SQUARE	5	30.098	0.000
MANTEL-HAENSZEL CHI-SQUARE	1	5.388	0.020
PHI		0.408	
CONTINGENCY COEFFICIENT		0.378	
CRAMER'S V		0.408	

SAMPLE SIZE = 211
WARNING: 50% OF THE CELLS HAVE EXPECTED COUNTS LESS THAN 5. CHI-SQUARE MAY NOT BE A VALID TEST.

Appendix W

MODEL I PATH COEFFICIENTS
DIRECT EFFECT OF CHILDHOOD ENVIRONMENT ON MMPI
DIRECT EFFECT OF BIOLOGICAL VARIABLES ON MMPI
DIRECT EFFECT OF CHILDHOOD SEXUAL INVOLVEMENT ON MMPI

DEP VARIABLE: MMPI_2

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	7	1174.83414	167.83349	0.764	0.6712
ERROR	2	439.36586	219.78293		
C TOTAL	9	1614.40000			

ROOT MSE	14.82508	R-SQUARE	0.7277
DEP MEAN	66.4	ADJ R-SQ	-0.2253
C.V.	22.32692		

NOTE: MODEL IS NOT FULL RANK. LEAST SQUARES SOLUTIONS FOR THE PARAMETERS ARE NOT UNIQUE. SOME STATISTICS WILL BE MISLEADING. A REPORTED DF OF 0 OR B MEANS THAT THE ESTIMATE IS BIASED. THE FOLLOWING PARAMETERS HAVE BEEN SET TO 0, SINCE THE VARIABLES ARE A LINEAR COMBINATION OF OTHER VARIABLES AS SHOWN.

SEX_INV =+1*PED_REL
KLINEFEL=+2*INTERCEP

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR H0: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	B	123.83349	56.59791363	2.566	0.1258	INTERCEPT
LOSSES	1	-20.99766766	21.50194836	-0.977	0.4318	
REL_FATH	1	28.93214877	23.97381428	1.207	0.3509	RELATIONSHIP TO FATHER
REL_MOTH	1	-37.33912538	20.38851212	-1.831	0.2085	RELATIONSHIP TO MOTHER
PED_REL	B	1.93316925	24.26292270	0.080	0.9437	PEDOFILE RELATIVE
SEX_INV	0	0	.	.	.	NO. OF CHILDHOOD SEXUAL I
KLINEFEL	0	0	.	.	.	KLINEFELTERS
LH	1	0.43927404	1.61602876	0.272	0.8112	
FSH	1	-0.08706085	0.59761125	-0.146	0.8976	
TESTOST	1	-0.06916233	0.04729190	-1.462	0.2811	TESTOSTERONE

Appendix W

MODEL 4 PATH COEFFICIENTS

DIRECT EFFECT OF CHILDHOOD ENVIRONMENT ON CHILDHOOD SEXUAL INVOLVEMENT

DEP VARIABLE: SEX_INV NO. OF CHILDHOOD SEXUAL INVOLVEMENTS

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	4	7.79655999	1.94914000	6.535	0.0001
ERROR	118	35.19530993	0.29826534		
C TOTAL	122	42.99186992			

ROOT MSE	0.5461367	R-SQUARE	0.1813
DEP MEAN	1.325203	ADJ R-SQ	0.1536
C.V.	41.21155		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR H0: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	0.64452060	0.20417102	3.157	0.0020	INTERCEPT
LOSSES	1	0.10385504	0.10727210	0.968	0.3350	
REL_FATH	1	-0.009806714	0.06404405	-0.153	0.8786	RELATIONSHIP TO FATHER
REL_MOTH	1	0.05324311	0.06203768	0.858	0.3925	RELATIONSHIP TO MOTHER
PED_REL	1	0.37722457	0.08031357	4.697	0.0001	PEDOFILE RELATIVE

1 MODEL I PATH COEFFICIENTS 11:04 FRIDAY, AUGUST 5, 1988

2

DIRECT EFFECT OF CHILDHOOD ENVIRONMENT ON INCEST

DIRECT EFFECT OF BIOLOGICAL VARIABLES ON INCEST

DEP VARIABLE: INCEST

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	9	0.50742925	0.05638103	0.546	0.8386
ERROR	107	11.04812630	0.10325552		
C TOTAL	116	11.55555556			

ROOT MSE	0.3213309	R-SQUARE	0.0439
DEP MEAN	1.111111	ADJ R-SQ	-0.0365
C.V.	28.91978		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR HO: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	0.84978799	0.67422123	1.260	0.2103	INTERCEPT
LOSSES	1	0.04578527	0.06600210	0.694	0.4894	
REL_FATH	1	-0.006816179	0.03938591	-0.173	0.8629	RELATIONSHIP TO FATHER
REL_MOTH	1	-0.000137444	0.03875153	-0.004	0.9972	RELATIONSHIP TO MOTHER
PED_REL	1	0.06119547	0.05308830	1.153	0.2516	PEDOFILE RELATIVE
SEX_INV	1	0.01514036	0.05649184	0.268	0.7892	NO. OF CHILDHOOD SEXUAL INVOLVEMENTS
KLINEFEL	1	0.07950862	0.32998301	0.241	0.8101	KLINEFELTERS
LH	1	0.001212183	0.002382625	0.509	0.6120	
FSH	1	-0.000703818	0.000579739	-1.214	0.2274	
TESTOST	1	-0.000040171	0.000128215	-0.313	0.7547	TESTOSTERONE

MODEL # PATH COEFFICIENTS

DEP VARIABLE: GRPCAT GROUP CATEGORY

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	2	2.96201541	1.48100771	6.325	0.0022
ERROR	172	40.27227030	0.23414111		
C TOTAL	174	43.23428571			

ROOT MSE	0.4838813	R-SQUARE	0.0685
DEP MEAN	0.3542857	ADJ R-SQ	0.0577
C.V.	87.29817		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR H0: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	-0.003851065	0.16273073	-0.024	0.7811	INTERCEPT
INCEST	1	0.42281655	0.12691366	3.332	0.0011	
SEX_INV	1	0.06961307	0.05493903	1.267	0.2068	NO. OF CHILDHOOD SEXUAL INVOLVEMENTS

MODEL Π PATH COEFFICIENTS
DIRECT EFFECT OF CHILDHOOD ENVIRONMENT ON CHILDHOOD SEXUAL INVOLVEMENT

DEP VARIABLE: SEX_INV NO. OF CHILDHOOD SEXUAL INVOLVEMENTS

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	4	7.79655999	1.94914000	6.535	0.0001
ERROR	118	35.19530993	0.29826534		
C TOTAL	122	42.99186992			

ROOT MSE	0.5461367	R-SQUARE	0.1813
DEP MEAN	1.325203	ADJ R-SQ	0.1536
C.V.	41.21155		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR HO: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	0.64452060	0.20417102	3.157	0.0020	INTERCEPT
LOSSES	1	0.10385504	0.10727210	0.968	0.3350	
REL_FATH	1	-0.009806714	0.06404405	-0.153	0.8786	RELATIONSHIP TO FATHER
REL_MOTH	1	0.05324311	0.06203768	0.858	0.3925	RELATIONSHIP TO MOTHER
PED_REL	1	0.37722457	0.08031357	4.697	0.0001	PEDOFILE RELATIVE

MODEL II PATH COEFFICIENTS
DIRECT EFFECT OF CHILDHOOD ENVIRONMENT ON INCEST
DIRECT EFFECT OF BIOLOGICAL VARIABLES ON INCEST
DIRECT EFFECT OF CHILDHOOD SEXUAL INVOLVEMENT ON INCEST

DEP VARIABLE: INCEST

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	9	0.50742925	0.05638103	0.546	0.8386
ERROR	107	11.04812630	0.10325352		
C TOTAL	116	11.55555556			

ROOT MSE	0.3213309	R-SQUARE	0.0439
DEP MEAN	1.111111	ADJ R-SQ	-0.0365
C.V.	28.91978		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR H0: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	0.84978799	0.67422123	1.260	0.2103	INTERCEPT
LOSSES	1	0.04578527	0.06600210	0.694	0.4894	
REL_FATH	1	-0.006816179	0.03938591	-0.173	0.8629	RELATIONSHIP TO FATHER
REL_MOTH	1	-0.000137444	0.03875153	-0.004	0.9972	RELATIONSHIP TO MOTHER
PED_REL	1	0.06119547	0.05308830	1.153	0.2516	PEDOFILE RELATIVE
SEX_INV	1	0.01514036	0.05649184	0.268	0.7892	NO. OF CHILDHOOD SEXUAL
KLINEFEL	1	0.07950862	0.32998301	0.241	0.8101	KLINEFELTERS
LH	1	0.001212183	0.002382625	0.509	0.6120	
FSH	1	-0.000703818	0.000579738	-1.214	0.2274	
TESTOST	1	-0.000040171	0.000128215	-0.313	0.7547	TESTOSTERONE

MODEL II PATH COEFFICIENTS
DIRECT EFFECT OF INCEST ON PEDOFILE STATUS

FILE: GRPCAT GROUP CATEGORY

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB>F
MODEL	1	2.65532488	2.65532488	11.194	0.0010
ERROR	203	48.15443122	0.23721395		
C TOTAL	204	50.80975610			

ROOT MSE	0.4870461	R-SQUARE	0.0523
DEP MEAN	0.5463415	ADJ R-SQ	0.0476
C.V.	89.14684		

PARAMETER ESTIMATES

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR H0: PARAMETER=0	PROB > |T|	VARIABLE LABEL
INTERCEP	1	0.08695503	0.14087680	0.631	0.5285	INTERCEPT
INCEST	1	0.42427249	0.12681077	3.346	0.0010	

Appendix X

Table 7

Summary of Similarities and Differences among Six Paraphilic Groups

	Homosexual Pedophiles	Heterosexual Pedophiles	Bisexual Pedophiles	Pedophiles	Exhibitionists	Sadists	Atypical Paraphilics	Non-Pedophiles
Mean Age	35	38	37	* 37	27	30	29	* 29
Birth Order	49% youngest	39% youngest	44% youngest	* 45% youngest	34% youngest	22% youngest	29% youngest	30% youngest
	31% middle	34% middle	44% middle	33% middle	39% middle	22% middle	32% middle	33% middle
	20% oldest	27% oldest	11% oldest	22% oldest	26% oldest	56% oldest	39% oldest	* 37% oldest
Race	91% white	85% white	80% white	89% white	89% white	95% white	82% white	86% white
	9% other	15% other	20% other	11% other	11% other	5% other	18% other	14% other
Marital Status	70% single	29% single	80% single	57% single	63% single	52% single	63% single	61% single
	11% married	* 41% married	10% married	22% married	22% married	24% married	16% married	20% married
	19% sep/div	29% sep/div	10% sep/div	22% sep/div	13% sep/div	24% sep/div	21% sep/div	19% sep/div
Number of Children	74% none	30% none	89% none	58% none	72% none	67% none	63% none	66% none
	26% one +	* 70% one +	11% one +	42% one +	28% one +	33% one +	37% one +	32% one +
Occupation	* 40% w/ kids	12% w/ kids	10% w/ kids	28% w/ kids	3% w/ kids	6% w/ kids	10% w/ kids	6% w/ kids
	56% w/ adults	88% w/ adults	90% w/ adults	72% w/ adults	97% w/ adults	94% w/ adults	90% w/ adults	* 94% w/ adults
Referral Source	12% self	23% self	10% self	16% self	5% self	13% self	14% self	10% self
	88% other	77% other	90% other	84% other	95% other	87% other	86% other	90% other
Number of Arrests	20% none	10% none	0% none	15% none	10% none	28% none	30% none	21% none
	80% one +	90% one +	100% one +	85% one +	90% one +	72% one +	70% one +	79% one +
Religion	31% Protestant	15% Protestant	56% Protestant	39% Protestant	28% Protestant	33% Protestant	36% Protestant	33% Protestant
	31% Catholic	8% Catholic	22% Catholic	23% Catholic	18% Catholic	33% Catholic	17% Catholic	21% Catholic
	1% Jewish	5% Jewish	0% Jewish	4% Jewish	5% Jewish	5% Jewish	0% Jewish	3% Jewish
	30% Other	39% Other	22% Other	33% Other	49% Other	29% Other	45% Other	43% Other
Education	8% Elementary	* 17% Elementary	10% Elementary	* 11% Elementary	5% Elementary	10% Elementary	6% Elementary	6% Elementary
	31% High Sch.	61% High Sch.	70% High Sch.	46% High Sch.	54% High Sch.	57% High Sch.	51% High Sch.	* 54% High Sch.
	30% College	12% College	20% College	21% College	37% College	29% College	35% College	* 31% College
	* 30% Grad. Sch.	10% Grad. Sch.	0% Grad. Sch.	* 20% Grad. Sch.	5% Grad. Sch.	5% Grad. Sch.	6% Grad. Sch.	5% Grad. Sch.
FSH level	11% low	7% low	20% low	10% low	10% low	11% low	18% low	11% low
	63% average	63% average	40% average	61% average	54% average	67% average	44% average	53% average
	27% high	30% high	40% high	29% high	37% high	19% high	38% high	33% high
LH level	8% low	5% low	0% low	6% low	7% low	24% low	18% low	15% low
	54% average	71% average	60% average	61% average	46% average	52% average	47% average	48% average
	38% high	24% high	40% high	33% high	46% high	24% high	35% high	38% high
Testosterone level	27% low	12% low	10% low	20% low	10% low	38% low	24% low	21% low
	44% average	61% average	30% average	49% average	24% average	33% average	41% average	32% average
	30% high	27% high	* 60% high(n=4)	31% high	* 66% high	29% high	35% high	* 47% high
Pedophile Relative	90% no	79% no	86% no	85% no	86% no	89% no	93% no	88% no
	6% yes	21% yes	14% yes	13% yes	14% yes	11% yes	4% yes	10% yes
Relationship Father	28% positive	18% positive	25% positive	24% positive	26% positive	17% positive	3% positive	16% positive
	72% negative	82% negative	75% negative	76% negative	74% negative	83% negative	97% negative	84% negative
Relationship Mother	59% positive	50% positive	29% positive	53% positive	31% positive	27% positive	50% positive	37% positive
	41% negative	50% negative	71% negative	47% negative	69% negative	73% negative	50% negative	63% negative
Lesion	* 67% no	50% no	10% no	54% no	53% no	50% no	55% no	54% no
	33% yes	50% yes	* 90% yes	45% yes	47% yes	44% yes	45% yes	46% yes
Sex Victim	67% no	72% no	43% no	67% no	71% no	70% no	80% no	70% no
	* 11% yes	28% yes	* 57% yes	33% yes	29% yes	21% yes	15% yes	22% yes
Violence	2% yes	12% yes	0% yes	0% yes	3% yes	* 90% yes	22% yes	* 29% yes
	98% no	88% no	100% no	* 94% no	97% no	10% no	78% no	71% no
Incest	95% no	71% no	100% no	87% no	90% no	100% no	100% no	* 99% no
	5% yes	* 29% yes	0% yes	* 13% yes	2% yes	0% yes	0% yes	1% yes

a percentages of each paraphilic group

* $p < .05$

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