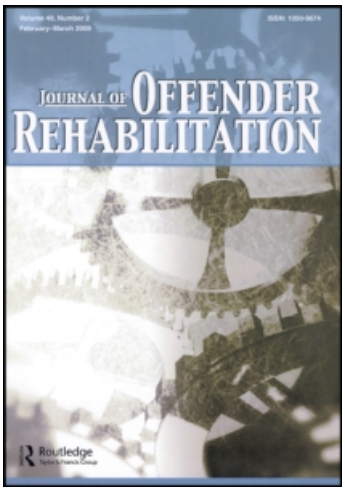

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Major Factors in the Assessment of Paraphilics and Sex Offenders

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Major Factors in the Assessment of Paraphilics and Sex Offenders

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ABSTRACT An assessment is presented that examines a number of prominent factors from the professional literature describing the background and clinical characteristics of paraphilic individuals and sex offenders. The factors include sexual history and preference, substance abuse, mental illness, personality and defensiveness, history of violence, neuropsychological impairment, and biological problems. The reliability and validity of measures in use are reviewed with suggestions for a battery of measures that offer some index of dangerousness and targets for treatment. *[Copies of this paper are available from The Haworth Document Delivery Service: 1-800-342-9678.]*

In this paper, we present an assessment package which can be administered by a clinical psychologist and which results in suggested guidelines for involving neurologists, endocrinologists, or other treatment specialists in the paraphilias and sexual offenders. The assessment attempts to be comprehensive and usually requires two full work days for completion.

DEFINITON OF PARAPHILIA

DSM-III-R indicates that the essential feature of paraphilias is the recurrent intense sexual urges and sexually arousing fantasies involving either (1) nonhuman objects, (2) the suffering or humiliation of oneself or one's partner, or (3) children or other nonconsenting persons. Paraphilics are a diverse group of individuals who have different 'programs' that activate sexual behavior and orgasm. Many of them end up committing sexual offenses because their sexual drive or desires overwhelm them to the extent that they act out in the face of social stigma or criminal laws. Thus, most often the clinician who sees a paraphilic individual is asked to assess the nature of the paraphilia, goals for treatment, and danger to the community. It is rare that paraphilic individuals come to the attention of clinicians without the involvement of the legal system.

IMPORTANT FACTORS TO ASSESS

A number of factors are prominent in the literature describing the background and clinical characteristics of paraphilic individuals. These factirs include such variables as (1) sexual history and preference, including gender identity; (2) substance abuse; (3) mental illness, personality, and defensiveness; (4) history of violence; (5) neuropsychological impairment; and (6) other biological problems, especially disturbances in the endocrine system. Each factor will be reviewed in turn with respect to current information. Reliability and validity of measures used in the evaluation of these factors will also be discussed (i.e., internal consistency, test-retest reliability, discriminant validity).

Sexual History and Preference

Sexual preference is an important concept to be addressed in the assessment. Some men engage in unusual sexual behavior because of circumstances, or for psychological reasons other than sexual preference. However, others have an anomalous erotic preference or sexual orientation that appears to be fixed for their lifetime. Thus, an individual with a paraphilic preference will be at long term risk for offense and must cope with his anomalous sexual desires. This has been recognized in more

- **Table 1: Factors Important in the Assessment of Paraphilic and Sex Offenders**

Sexual History & Preference

- *80% of extra-famililal child sex abusers are pedophiles*
- *25% of incest offenders are pedophiles*
- *65% to 80% rapists of adult women are courtship disorders*

Substance Abuse

- *52% are alcoholics overall*
- *57% to 71% abuse street drugs but only 2% to 3% are addicted*

Menal Illness

- *5% to 10% of all groups are psychotic*

Personality and Defensivensess

- *Up to 67% show defensiveness*
- *40% are antisocial personaity disorders*

Violence

- *20% to 50% of child sex abusers are violent*
- *50% to 85% of sexual aggressives are violent*

Neuropsychological

- *50% to 60% of pedophiles show brain damage and/or dysfunction*
- *40% to 50% of sadistic sexual aggressives show brain damage or dysfunction*

Other Biological Factors: Endocrine Disorder

- *Pedophiles show HPA hormonal abnormalities (e.g., GnRH test)*
- *Sexual aggressives may show adrenal axis abnormalities*

Note: Data are from the senior author's database and publications from the professional literature.

recent models, such as relapse prevention therapy (Marlett & Gordon, 1985; Bays & Freeman-Longo, 1989).

As shown in Table 1, sexual preference patterns may differ within a particular offender group, i.e., child sex abusers, and provide clues to understanding the anomalies as well as suggest different directions for treatment (cf. Freund & Watson, 1992; Langevin & Lang, 1990; Bain, Langevin, Hucker, Dickey, Wright & Schomberg, 1988; Langevin, 1985; Webster, Menzes & Jackson, 1982).

Extra-familial child sexual abusers are predominantly (80%) pedophilic in sexual preference whereas 25% or less of intra-familial child

sexual abusers are. Similarly, not all rapists (or sexual aggressives) are sexually deviant, although many are. It is generally assumed that sexually deviant individuals will have to cope with their sexual urges all their lives, whereas sexually conventional individuals will not.

In evaluating tests of sexual history, sexual preference, as well as any other instrument used in an assessment, the examiner should always be selecting reliable tests that discriminate groups of interest, (i.e., a test of pedophili a should discriminate pedophiles from non-pedophiles on a better than chance basis). Using these criteria for selection of clinical assessment instruments reduces problems that the examiner may have in court when questioned about the validation of the measures used. It also provides the clinician with an assurance that the tests used do not suffer from fundamental defects that may influence the confidence that one can place in clinical judgements.

Plethysmography

In the area of sexual behavior, penile plethysmography is one of the most reliable and valid physiological measures available. Zuckerman (1971) noted that, of all the methods available for measuring sexual interest, penile plethysmography was in a league of its own.

The earliest device was the penile volumetric measure developed in the 1950's by Kurt Freund and his colleagues in Czechoslovakia (Freund, Diamant& Pinkava, 1958). In the 1960's Bancroft, Jones and Pullan (1966), and later, Barlow, Becker, Leitenberg and Agras (1970) and Laws and Bow (1976) developed reliable penile circumference measures which are currently far more popular because of their ease of use. The volumetric measure requires more training to master than the circumferential measures (cf. Wheeler & Rubin, 1987). Both measures are useful in differentiating sexual preference patterns, although volumetry is far more sensitive and discriminating. Penile volume and circumference measures bear, on average, a 50% relationship (Freund, Langevin & Barlow, 1974) or less (cf. Wheeler & Rubin, 1989), but a number of studies have shown that both devices are highly specific and sensitive in identifying sexual preferences (cf. Frenzel & Lang, 1989; Freund & Watson, 1992) . Penile circumference measures are not as sensitive but, by far, still provide a better index of sexual preference than almost any

other measure, penile volume excepted. Penile erection (P.E.) is a function (f) of penis diameter (D) and length (L) or $\rightarrow P.E. = f(D,L)$.

Penile circumference devices only examine D, whereas penile volume devices examine both D and L. Mathematically, circumference devices would be expected to be less sensitive than volumetric devices. Empirically, one finds that both types of apparatus discriminate sexual preferences but longer exposure times to stimuli are often required with circumference measures, and there are more non-responders than one sees with volumetric measures.

There are differences in reporting of penile responses using the two types of devices. Usually penile circumference is reported as 'percent of full erection' whereas volume is reported as raw score or Z score within persons and compared to responses to sexually neutral stimuli. Reporting differences are arbitrary but it is often difficult to have subjects achieve full erections in the laboratory and unsound practices have appeared, e.g., 'ask the subject when he achieves 75% full erection and use that value to compute percent full erection' or 'assume all men have the same penis circumference size at full erection and divide raw circumference change by a constant to compute percent full erection.' These faulty procedures have been introduced because too much data would be lost otherwise. However, use of sexually neutral materials makes this computation unnecessary and also provides an index of baseline reactivity level to compensate for random responding (cf. Freund, McKnight, Langevin & Cibiri, 1972).

Unfortunately, in the area of penile plethysmography, very few studies have reported on the reliability and validity of critical stimuli used in testing, which may include a mixture of department store catalogue pictures and *Playboy* centrefolds that are quite diverse in terms of color and content, the amount of clothing worn by the model, the posture and provocativeness of the stimulus subject, among other factors. It is usually assumed in studies of phallometry that the stimulus materials are measuring a pre-supposed construct (e.g., pedophilia, or an erotic interest in children versus adults) without any external validation if this is indeed the case. Even sexual stimulus materials may differ in unknown ways that can influence erotic arousal or interest.

Controversy exists in the literature about the value of phallometry itself rather than about the stimuli that are used when, in fact, there is little evidence that most available stimuli are internally consistent or are tapping the erotic dimension of interest to a particular subject group. This problem is well illustrated by a study of Sakheim, Barlow, Beck, and Abrahamson (1985). The authors compared eight heterosexual and eight homosexual men on heterosexual, homosexual, and lesbian erotic materials presented in film, audiotape, and slide form. A number of other measures were taken, including subjective ratings of arousal. The results are interesting in that the Lesbian materials were as good, if not better, discriminators of homosexual and heterosexual interests than the heterosexual erotic materials. Logically, this presents a paradox because sexually deviant materials are more arousing to heterosexuals than the erotic interaction of a man and a woman (presumably the prefe rred stimulus). This does not mean that the erotic materials are useless, but rather the materials depicted may be so complex as to preclude clear discrimination of the erotic patterns present in heterosexual versus homosexual men. These limiting assu mptions are also evident in the Rape Index (Abel, Barlow, Blanchard & Guild, 1977), in which the penile arousal to rape versus consenting intercourse is examined. A number of these Rape Index stimuli portray *forced* intercourse versus *consenting* intercourse whereas a number of other dimensions, such as control and humiliation, may be important in the sexual arousal of rapists, particularly of the sadist (cf. Langevin, Bain, Ben-Aron, Coulthard et al., 1985).

A review of the literature on phallometry indicates that there are almost no attempts to determine the internal consistency of stimuli used in the phallometric evaluation. Sound psychometric tests should have repeats of the same stimulus to allow an evaluation of the reliability of that stimulus. Wormith (1985) found a mean $r = 0.67$ comparing 12 rapists, 12 pedophiles, and 12 nonoffenders on 6 categories of erotic materials — male child, female child, adult male, adult female, couples, and sexually neutral materials. Davidson and Malcolm (1985) examined test-retest reliability of the Rape Index in 90 rapists over a 6 day period and found $r = 0.65$, which confounds time and internal consistency. Similarly, Baxter, Barbaree, and Marshall (1986) examined the Rape Index at two sessions in 60 rapists and 41 university student controls and

reported test-retest reliability of only $r = 0.26$. Results here, as in other studies using penile circumference, must contend with a significant number of nonresponders, especially among incarcerated offenders. For example, when Baxter et al. excluded 21 of the 60 rapists who showed less than 25% full erection, they found $r = 0.51$. Thus reliability in available studies using penile circumference is moderate at best. This lack of stimulus validation, of course, casts doubt on the interpretation of results when one is comparing two groups, such as sex offenders versus community controls.

There are stimuli used in volumetric testing that have been examined for reliability and discriminant validity. The internal consistency of stimuli used by Freund and his associates has been reported in two publications. Frenzel and Lang (1989) compared 27 erotic and sexually neutral movie clips developed by Freund et al. These stimuli were shown to 191 men consisting of 62 heterosexual intrafamilial child sexual abusers, 57 heterosexual, 25 homosexual extra-familial child sexual abusers, and 47 community controls. Analysis of the tests showed that the phallometric stimuli had high internal consistency (Alpha = 0.93). The age groups of female and male stimulus subjects (age range 5-8, 9-11, 12-14, 18-25) are well correlated with Tanner Scores. These authors also examined group discrimination, a feature that is more common to other studies as well. Typically 10% or fewer of the cases are nonresponders, which also extends the usefulness of the test. Freund and Watson (1992) also examined a large sample of offenders and reported comparable reliabillty and validity indices with over 90% specificity in identifying pedophilia.

It is clear from the studies of Freund, McKnight, Langevin & Cibiri (1972) and McConachy et al. (1967) that the body shape characteristics of men, women, boys, and girls play a significant role in the discrimination of heterosexual versus homosexual orientation and adult versus child orientation.

In Freund's original pictures of men, women, boys and girls, the subjects were sorted according to developmental age and were readily categorized into the Tanner scores of physical sexual development (Freund et al., 1972). The stimuli were all similar in that each subject was fully nude and walked towards the viewer in front of a blue curtain. Each

stimulus was presented for 14 seconds. In no case was there sexually provocative behavior. One can say with some confidence that it is the body shape characteristics of the stimulus subjects that are foremost in these pictures. More recently Freund has shortened the test so there are 27 double segments, that is, two people shown in succession from the same stimulus category, in total for 28 seconds. These stimulus materials have alpha reliability of 0.93. No other phallometric stimulus materials have published reliability of this order in the psychological and psychiatric literature. Freund's test materials are highly discriminatory in differentiating heterosexual and homosexual preference as well as preference for children versus adults — that is, age-sex preference. The rate of differentiation for both sex and age preference was approximately 90%.

The picture, however, is somewhat different when it comes to examining *response* or *activity* preferences — that is, sexual anomalies such as exhibitionism, rape, or other paraphilic behavior in which the response of the paraphilic individual seems to be more important than the age or sex of the person with whom he engages in sexual behavior. In many cases, the adult female is the preferred stimulus person and, thus, no new information would be gained from the foregoing age-sex preference visual test.

A number of authors have attempted to generate auditory stimulus materials to evaluate *exhibitionism* (cf. Langevin, 1993; Freund, Scher & Hucker, 1983, 1984; Marshall, Payne, Barbaree & Eccles, 1991), but without great success to date. Part of the difficulty is retaining long sequences of auditory information in memory as opposed to dealing with the immediate visual stimulus. Thus, the listener may have difficulty retaining the information that an 8 year old girl is the subject of sexual arousal. He may focus more on the exposing aspect or the sexu al interaction and forget the 8 year old.

There are a number of confounding variables in auditory stimulus presentation that have not been evaluated fully to date. The ability of the listener to form images or fantasies while listening to the tape may be important, i.e., clearer erotic fantasies may be more arousing (cf. Langevin, 1983). The stimuli can also differ in a number of ways, such as duration of stimulus, percent of direct erotic versus non-erotic "setting

the scene" material, amount of detail devoted to the age/sex characteristics of the stimulus subject, or the sex of the narrator. Another potentially important factor is the person used in the statement (i.e., use of "I," "you," or "he") which may influence involvement of the listener, although no empirical data exits to settle the matter. Thus, much empirical information is required before the value of phallometric testing for response preference can be dismissed as valueless.

A Rape Index has been popular in recent years (see Abel et al., 1977; Murphy, Haynes, Coleman & Flanagan, 1985) . It is used to distinguish sexually aggressive men from non-aggressive controls. The cumulative work to date suggests that this index is no better than chance. Quinsey (1993) in a meta-analysis has proposed a number of explanations for the disappointing results of phallometric controlled studies of the Rape Index. As Quinsey's study suggests, further work on the Rape Index may prove fruitful.

The validity of phallometric testing itself has been contested because there is not a single pattern of phallometric results for *legal offense categories,* e.g., sexual assault of a minor. For example, only a minority of incest offenders show greater sexual arousal to children than to adults. Extra-familial child sexual abusers may show the largest reactions to a 5-to-8 year old female or may show larger reactions to pubescent females, or to adult females or even to both boys and girls. This has also been considered evidence that the test is not useful. However, results have been consistent over studies showing that child sexual abusers, as a group, react more to children than they do to adults. The finer discrimination of categories may provide clues to further understanding subgroups, but it certainly does not support the conclusion that the test is invalid.

The discriminant validity of the phallometric test has been questioned (e.g., by Murphy, 1992), because the range of discrimination averaged around 67%. In some cases, it appears that the stimuli are at fault, i.e., the Rape Index based on forced intercourse versus conventional intercourse or an aggression index based on physical beating versus consenting intercourse. It seems that the stimuli are not fine-tuned and, therefore, may not tap the actual response preference anomaly exhibited by the offender. However, in other cases, the age-sex discrimination appears to

be satisfactory, especially when examined through volumetric phallometry and using stimuli that have been evaluated for internal consistency, i.e., Frenzel & Lang (1989) and Freund & Watson (1991). Thus, two findings emerge from the research on phallometry. First, many stimulus materials used do not have documented internal consistency results and, to a lesser degree, may not have been evaluated for the discrimination of clear criterion groups. Second, response preference anomalies such as sexual sadism or exhibitionism, are more complicated than they were believed to be 20 years ago. We have much to learn about them but phallometric research provides a means to explore in precise terms the nature of the deviant sexual arousal experience (see also Simon & Schouten, 1991; Quinsey & Laws, 1990).

Phallometric measures have also been criticized because they can be faked (cf. Langevin, 1990, for review). Usually faking is achieved by movement, either attempting to inhibit erections to deviant stimuli or increasing erections to adult females ("pumping") which are detectable artifacts. Some individuals try to look away from the stimulus picture but many laboratories monitor the face of the subject to ensure he is watching the stimulus. Card and Farrall (1990) used penile circumference, respiration, and galvanic skin response measures to evaluate faking of 18 volunteers in 108 faking attempts. Penile measures alone detected 45% of the faking but adding GSR and respiration measures increased it to 84%. Thus, faking results is a problem with which phallometry must contend, as must all psychological measures, but is not an insurmountable barrier to diagnosis.

Another issue that has been raised in the literature is the role of habituation and fatigue on sexual arousal during phallometric testing (Simon & Schouten, 1991). Some studies show no decrement in arousal across trials or sessions whereas others do. Of course, results will be influenced by the amount of material presented and the interval between tests. It appears often in the short run that there is a decrement in response within sessions (cf. Freund et al., 1972). Therefore, if one is assessing the relative erotic potency of sexually deviant versus conventional and sexually neutral materials, it is advisable to avoid such a factor by presenting fixed random blocks of the stimulus materials. For example, if three stimuli are presented, they can all be presented in a first block

and then randomized for presentation in a second block and so on. If there are any fatigue effects across blocks of trials, it will affect each category of stimuli approximately to the same extent.

Similarly, anxiety or depression may influence the phallometric assessment and some determination of the client's state prior to entering testing should be made. A standardized method to reduce tension and make the client a s comfortable as possible will help, but may not totally eliminate the problem. Not all phallometric assessments should be considered valid. Some individuals will not respond because of mood state, mental illness, or problems of potency, etc. This, however, does not diminish the value of the test. It is noteworthy that in a number of published studies the frequency of non-responders may be considerably higher with the commonly used circumference device, more so than it is with the more sensitive volumetric device.

The phallometric test remains a valuable instrument in clinical assessment. Although it is far from perfect and is subject to faking (this is also true of most psychological tests as well as phallometry), it should not be abandoned for this reason. However, clear standards for administration and standardization of materials are needed.

Other Measures

Phallometric testing is insufficient for examining the total sexual makeup of an individual. An examination of presenting charges alone is also unsatisfactory. One's current sexual behavior, i.e., the offense, may not provide the total map of an individual's sexual preferences, so an analysis of sexual history in one form or another becomes necessary. Frequently, an individual will present with one offense, i.e., indecent exposure, and will be labeled as an exhibitionist or in some other category that relates in an obvious way to his charges. However, there is often an overlap of sexual behaviors that may not be revealed by the charge, but only from the history of the client (cf. Freund, 1988, and Langevin, 1983). Thus, the exhibitionist may also be a pedophile. The male who is involved with a child may also be a sadist. It is therefore necessary to examine a broad range of behaviors and to follow-up the legal information on charges with an examination of sexual history. The tests used should examine for the presence of other sexual anomalies, their relative

strength, their duration, their potency for the individual, and if they are orgasmic in nature (cf. Langevin, 1983, 1985).

Standard interview schedules are available (e.g., Kinsey Institute), as well as a number of sexual inventories, including the Multiphasic Sex Inventory (Nichols & Molinder 1984), the Thorne Sex Inventory (Thorne, 1966), the Freund Erotic Preferences Examination Scheme (EPES, unpublished), and the Clarke Sex History Questionnaire, or SHQ (Langevin, 1991). The Kinsey interview requires training and may be too long and unfocussed for examination of sexual deviation diagnosis and preference. The MSI is, in large part, an index of admission to deviant fantasies and thought rather than an examination of the types and frequency of various sexual behaviors that have occurred in the individual's life (cf. Simkins, Ward, Bowman & Rinck, 1989). The Thorne Inventory is psychodynamic in orientation but is not as focused in examining sexual behavior, and it was not designed to derive paraphilic diagnoses. Only Freund's EPES and the Clarke SHQ provide a basis for such diagnoses.

The full EPES is long and validation data on the measure are limited, while the Clarke SHQ has been developed over a 20 year period and examines a wide range of anomalous sexual activity as well as measuring conventional heterosexual activity. The frequency and type of contacts by an individual are combined in 14 different scales to provide a score that is compared both to heterosexual controls and to a deviant sample in each category. Thus, a man who sexually molested a child would be compared on the Adult Female Frequency Scale for the amount of contact that he has had with adult women compared to community sample and, separately, compared to a sample of sexually deviant men. He would also be compared on the Female Child Frequency Scale against a community sample and a sample of heterosexual pedophiles who admitted to their deviant sexual preference. These scales provide some index of the extent of sexually deviant acting out and also of the extent of heterosexual experience and thus, the extent to which the respondent would be adaptable to conventional sexual behavior. The internal consistency of the SHQ Scales ranges from 0.69 for Frottage to 0.98 for Male Adult Frequency. Discrimination of criterion groups ranges from 74% to 98% correct identification.

A number of measures have examined masculinity-femininity, but there is only one *gender identity scale* in the literature that has any validation and reliability data, the Freund GI Scale (Freund, Langevin, Satterberg & Steiner, 1977). The Bem Androgyny Scale (Bem, 1974) and the MMPI Masculinity-Femininity Scale are not as specific and reflect both sex roles and masculinity-femininity and possibly other factors (cf. Sanders, Langevin & Bain, 1985).

Gender identity is important in the assessment of gender dysphoria, i.e., transsexualism, transvestism, and related paraphilias as well as in examining sexual violence (cf. Langevin et al., 1985). There is frequently an overlap of interest in sadomasochism and transvestism or transsexualism. Approximately one-fifth of the rapists seen in our clinic who were convicted of sexual assault also engaged in orgasmic crossdressing. The extent of gender disturbance is important to evaluate since it may be related to the other aggressive activities of the offender (cf. Langevin, et al., 1985).

In examining sexual history and preference, the Freund Phallometric Test of Erotic Preference, the Clarke Sex History Questionnaire, and the Freund GI Scale can be used as the most reliable, valid, and convenient instrument s available and, in the case of the last two, the only two instruments of their kind available. An interview, of course, is essential in conjunction with the self-administered tests.

Substance Abuse

Most men and women in our society have drunk alcohol at some time in their lives. It is not surprising then that 52% of men who committed sexual offenses were drinking just prior to their offense (US Congress Survey, 1987). Some authors (e.g., Groth & Birnbaum, 1979; Howells, 1981) argue that the offender's drinking is coincidental to the sexual offense. However, other authors (including Forester, 1983) consider sexual misbehavior and sexual offenses to be a product of alcohol abuse. This latter position is often viewed with suspicion by clinicians because it provides an excuse for the crime and does not force the offender to acknowledge his guilt which is, in some cases, part of the therapy process. Empirical facts seem to lie somewhere between these extreme points of view.

Reports in the professional literature on alcohol abuse among sex offenders range from 0% to 52%. The quality of the available studies varies greatly and, in many cases, no standards for evaluating substance abuse are reported. Only rarely are standard instruments used in the reports (cf. Langevin & Lang, 1990, for review).

Studies using some standard of measure, such as the Michigan Alcoholism Screening Test (MAST), show alcoholism to be a common problem among sex offenders. The MAST (Selzer, 1971) is a 25-item self-reported questionnaire that examines the main dimensions of alcoholism. Rada (1976) studied 203 pedophiles and found 52% were alcoholics using the MAST. In their examination of 461 male sex offenders, Langevin and Lang (1990) found that between 86% and 94% of the sub-groups had used alcohol at some time in their lives similar to the male Canadian population at large. However, a total of 52% were alcoholics based on the MAST score, compared to 5% of Canadian males in the general population. A total of 57%-to-71% had tried one or more drugs, with marijuana the most common. Although most men had tried some drug, only 2%-to-3% scored on the MAST in the range where drugs represented a current problem. Thus, one can argue that consumption of alcohol at the time of the sexual offense was coincidental, but it is more difficult to understand why sex offenders are 7-to-10 times more likely to be alcoholics than the population at large. It has been argued that they are more likely to be caught than non-alcoholic sex offenders, because of their disorganized and irrational behavior.

It is unknown at present whether more sex offenders are alcoholics or whether alcoholics in general are more likely to engage in deviant behavior, including sexually offensive behavior. In any case, substance abuse is a treatment target that can play a role in the sexual offense relapse cycle and it must be addressed. Rada (1978), for example, noted that more alcoholic than non-alcoholic rapists were drinking at the time they committed their offenses. In their 1976 study, Rada, Laws, and Kellner, found that 85% of alcoholic rapists versus 19% of non-alcoholic rapists were drinking when they committed their offenses. The client who is drinking or who is out of control, may fail to comply with treatment, to benefit from therapy sessions, and may engage in a range of irrational, dangerous, or anti-social acts. Rada et al. found, for example, that the

more violent the crime, the more likely alcohol or drugs were involved (Rada, 1978). Alcohol is a much greater problem than drugs because it is more readily available.

Reported drug abuse ranges considerably from 0% to 58% in the sex offender population, with marijuana used most often and narcotics used least often. However, many authors do not report on drug use and it is unclear whether they asked about drug use at all. Moreover, because alcohol use is socially condoned, offenders may be less reluctant to report their use of alcohol than drugs which might complicate their existing court case. Certainly the variation both in the type of offender that one is asked to assess and their history of drinking is complicated by referral source and setting of the assessment, as well as a number of other selection factors. For example, in our own clinic, the proportion of sex offenders who are alcoholics averages 52%. When one selects out the federal parolees who are given longer sentences and commit more serious crimes, the proportion of alcoholics is 72%. Lawyers and crown attorneys will also select cases for evaluation in unknown ways so that sample bias may play a role. The area of the country or the culture in which one has his or her clinical practice may also play a role in the drinking habits of the community at large or in who is referred for an assessment. These factors must be taken into account when evaluating the extent and seriousness of the substance use or abuse being assessed.

Drugs create a different type of problem. Drug use is more difficult to define because quality and purity of drugs are usually unknown to the users, even if they are being candid with the examiner. In fact, they may tell you that they have had marijuana and have had something else, including possibly more dangerous drugs such as PCP or amphetamines.

In the assessment, it is important to know the extent of alcohol and drug use, whether it is out of control, wheth er it is used as a vehicle to commit sexual offenses, or whether it is just part of an overall pattern of disorganization and anti-social behavior for the offender. A number of scales have been developed to examine alcohol use, including the Mac-Andrew (1965) Scale from the MMPI. However, many scales are unsatisfactory because they do not sample reliably and validly the major dimensions of alcoholism, as identified by the World Health Organization, i.e., social, cognitive, and medical problems. The alcoholic fre-

quently experiences cognitive disorganization and confusion, and this is reflected in the global brain pathology that they experience. Social problems they experience that make them socially dysfunctional are family and marital difficulties, failure to maintain employment, arrests, fighting, losing their employment, and so on. Finally, they are exposed to a number of physical diseases, most noteworthy cirrhosis of the liver, as well as other physical complications.

Our own work suggested that the MAST is unaffected by social desirability response set (cf. Langevin, 1985). However, alcoholics are notorious for denying their problems, even though it may be evident to everyone else. It is therefore valuable, if possible, to obtain from the client's physician, the results of liver functioning tests, i.e., GGT, AST (SGOT), ALT (SGPT) and Alkaline Phosphatase. Since these enzyme tests do not overlap completely in their results, it is necessary to examine all three. This provides some objective criterion for the physical status of the drinking client. For example, in a sample of 31 sexual offenders and controls, Bain, Langevin et al. (1985) found that 29% of their sex offender clients had significant liver damage, although the mean age of this sample was in their mid-20's.

It is further necessary to evaluate the history and extent of, and specifics of, alcohol use throughout the individual's life. one should ask about the current use of beer, wine, and hard liquor. The individual is also asked when he started drinking, periods in his life when he was drinking every day, the frequency with which he has been drunk in his life, the presence of any psychotic symptoms, i.e., alcohol hallucinosis, or delirium while using alcohol, about the nature of fights and arrests that may have occurred surrounding alcohol, and about his employment difficulties that may have arisen as a result of his drinking. Although it seems redundant, it is necessary to ask about the quantity of beer, of wine, and of hard liquor because individuals who are heavy drinkers tend to under-report their consumption of alcohol but may respond to direct questioning. It is important not to allow the individual to define himself as a 'light' or 'social drinker' but rather to ask directly for quantities. Statistics Canada provides the guideline that 14 or more drinks per week qualifies an individual as a 'heavy drinker.' Sixteen percent of the

Canadian population consumes this quantity, and only 5% are alcoholics.

The Drug Use Survey (Langevin, 1985) asks about the full family of street drugs that may have been used, and the number of times that they have been used. The survey also asks about the emotional and physical effects experienced during use, i.e., changes in mood, aggressiveness, paranoia, breaks with reality, etc. It is possible, for example, that most individuals who use marijuana will have a relaxing pleasant experience or no affect at all. However, the occasional individual will experience aggressiveness, paranoia, and a loss of touch with reality. The individual who loses touch with reality under the influence of either alcohol or other street drugs may be at greater risk for irrational or violent behavior than one who does not.

Lawyers or crown attorneys may sometimes ask the examining clinician to make a statement about the state of intoxication of the offender at the time of the offense. However, such an evaluation is fraught with uncertainty. It is often difficult to know how much the offender was consuming and what its effect on him was at the time. The effect of alcohol is related to tolerance for alcohol and the metabolic rate of the alcohol (i.e., was he eating, what is his weight, what congeners were used with alcohol, etc.). There is some controversy over the definition of alcohol abuse and alcoholism, but the World Health Organization has developed standards requiring that the drinker has depended on alcohol to the extent there is a noticeable mental disturbance or an interference with body and mental health, interpersonal relations, and smooth social and economic functioning. Many of the clear signs of alcoholism, such as dependence, withdrawal, delirium, and alcohol hallucinosis, are less frequently seen in the sex offender population and usually require years of heavy drinking to be manifested. Sex offenders are usually younger and one must look at the role of alcohol in the *developing* alcoholic and heavy drinker.

Theorists are divided on the extent to which drug abuse is a problem and they have many difficulties with definitions. However, the Drug Abuse Screening Test, or DAST (Skinner,1982) offers an analogous scale to the MAST and examines the disruptive social, personal, and physical effects of street drugs. The 20-item questionnaire provides an

index in which drug abuse is no problem at all, is a moderate problem, or a severe problem. The questionnaire asks for drug use in the past 12 months; however, the present examiners ask about lifetime drug use to have an index of drug use and its problems throughout the lifespan.

Some drugs are more often associated with violence (e.g., amphetamines); however, even alcohol may trigger violent behavior, e.g., in pathological intoxication. Thus, the emotive aspects of drug and alcohol use should be ex amined, as they are in the Drug Use Survey (Langevin, 1985).

The examining clinician will want to know if his/her client is an alcoholic or drug addict in addition to being sexually deviant. The client may be a sexually conventional man confused in his behavior and judgement, or the alcohol may be a vehicle to allow him to act out his deviant sexual desires or possibly the alcohol/drug use was coincidental. DSM-III-R suggests that individuals who are mentally handicapped or brain-impaired may be more susceptible to the influence of alcohol, even when they consume smaller quantities. The offender may have increased the dose of his drugs at the time of the offense. Thus, the role of substance abuse in sexual behavior is complex.

Mental Illness, Personality, and Defensiveness

Approximately one in ten of the sex offenders and paraphilics seen in our clinic suffers from a psychotic mental illness. Higher estimates have been offered (e.g., Hoenig & Kenna, 1974), but 5% to 10% appears to be more common (cf. Webster, Menzes & Jackson, 1982). It is common to see depression as a reaction to criminal charges but some men also show this pattern of behavior throughout their lives in response to other stress or as an endogenous mental illness. It is usually important to deal with mental illness as a first priority. The courts also may want the clinician to determine whether the offender is fit to stand trial.

Mental illness is an important factor in only a minority of sexual offenders but its presence is most significant and therapy should be provided as soon as possible. The SADS (Schedule for Affective Disorders and Schizophrenia, developed by Endicott & Spitzer, 1978) provides a standardized interview that offers a DSM-III-R diagnosis of psychotic behavior. In the case of most paraphilic individuals, only a few questions

from the SADS need be asked to eliminate them from a psychotic category, i.e., the presence of hallucinations and delusions. Questions on depressive or manic episodes lasting longer than one week also provide a short examination for diagnostic purposes. Many of the offenders will be depressed but fewer will be clinically depressed or suicidal, indicating a need for immediate treatment.

The present authors employ the MMPI (now MMPI-2), which is one of the most widely used instruments in the history of psychology, as a screen for mental illness and for examining a variety of personality traits. The test provides some corroboration of the diagnosis provided by the SADS. It also offers three validity scales (L, F, and K) that provide some check of test taking attitude in the client.

A number of personality measures have been developed from the MMPI and these have been examined by Langevin, Wright, and Handy (1990-a, 1990-b) in a sizable sample of sex offenders. Although a number of traits appear to be reliably measured, it is questionable whether any of these scales are truly useful clinically in evaluating the behavior of sex offenders. The same may be said of the more recently developed Millon Multiaxial Personality Inventory (Millon, 1982; cf. Langevin, Lang, Reynolds, Wright et al., 1989).

The clinician will want to know if a mental illness seen in their client *explains* the aberrant sexual behavior or is coincidental to it. Phallometric testing and knowledge of sexual history are valuable in this respect but sex information may not be available and phallometric testing not possible because of the patient's mental confusion or medication at the time of assessment.

Personality is often evaluated as a factor in sexual anomalies and, at one time, it was believed to be most important (cf. Langevin, 1985-b, for review). Although many of the hypotheses and claims about personality have not withstood empirical test, one particular type of personality disorder is important to evaluate, that is, the anti-social personality disorder. Individuals who have poor socialization, and an extensive history of crime and violation of social norms, may engage in child sexual abuse or other sexual offenses out of curiosity or because of situational circumstances. The presence of an anti-social personality disorder is an important risk factor for acting out. Some individuals prefer to think of

the "psychopath" in such terms but the definition of both anti-social personality disorder and psychopath may be illusive (see DSM-III-R). Finally, DSM-III-R criteria for Anti-social Personality Disorder are examined in part through the use of the interview, the SADS, and, in part, from the Cumulative Violence Scale, discussed below.

History of Violence

An important concern is the extent to which violence is an integral part of the paraphilic's behavior pattern, either because he may harm himself or will harm others. Violence is difficult to evaluate because it is not a unitary construct and is an infrequent event. Its prediction therefore is difficult. However, the best prediction of future violence is past violence, so assessment of an individual's potential for aggression is indicated.

Approximately 20% of the sex offenders seen in our clinic have engaged in gratuitous violence against child sexual abuse victims. Christie, Marshall, and Lanthier (1979) reported an even higher incidence at 50%. Their sample, however, is from a federal penitentiary in which the more serious offenders are incarcerated, while the samp les seen in our clinic are broader based and include pre-trial, pre-sentence, post-penitentiary release, and voluntary clients. Earlier reports (see Mohr, Turner & Jerry, for review, 1964) indicated that pedophiles were non-violent, without the benefit of systematic empirical data. More current reports suggest otherwise (see also Lang, Frenzel, Black& Checkley, 1988), so that the potential of the offender to harm children should be dealt with carefully and thoroughly. Of course violent behavior among sexual assaulters of adult women is even more pronounced and is more often recognized in the literature (cf. Langevin, 1985-a).

In the assessment, the circumstances for the arousal of aggressiveness and carrying out a violent behavior should be examined for each person, i.e., whether it occurs in the context of the family, or only under the influence of alcohol, etc. In some individuals one can see a pattern of aggressiveness that runs throughout their whole lives, appearing in childhood and continuing in adulthood. However, for most individuals, this is not the case.

In some clinical circles, the triad of enuresis, firesetting, and cruelty to animals is considered to be predictive of adult criminality and violence. Langevin et al. (1981) found that this triad was not a useful discriminator of murderers versus non-violent control offenders. The presence of the triad may, nonetheless, signal a significant problem of violence.

Pathological family relations appear to be associated with adult violence and criminality. The Gluecks in the 1950s found that disturbed parent-child relations were a frequent factor in the histories of juvenile offenders. Feelings of abandonment, of aggressiveness, and often alcoholism in the parents are the precursors of the criminal paraphilic person as well as of criminals in general. The Parent-Child Relations Questionnaire (PCR; see Paitich & Langevin, 1976) is a 126-item questionnaire that examines the exchange of aggression between parents and respondent as well as other measures, induding parent's indulgence, affection, strictness, iden tification, and the rated competence of the parents. This scale does not directly measure the parent-child interactions of the offender and his parents since this occurred long ago. However, it examines attitudes and feelings towards parents and recollection of those experiences which are likely more important reflections of current attitudes and beliefs towards authority figures and the world in general.

The PCR is a reliable instrument that has some validity and has been reworked over a period of 17 years (cf. Paitich & Langevin, 1976). Since parent-child interactions are often the current focus of adjustment in the community for offenders who are released from jail and the focus for many psychotherapeutic models, this inventory serves a number of purposes.

The Cumulative Violence Scale (CVS) is a collection of items examining many aggressive behaviors throughout childhood and adulthood but is not considered predictive of future violence (Langevin, 1985-a). Nor can any other scales be considered reliable predictors of future violence. The CVS does provide a fairly comprehensive collection of items that should be examined in an interview dealing with violence. The scale focuses on *actual behaviors* rather than *perceptions* of violent behaviors since violent offenders so often distort what they label as 'aggressive' or 'violent' (see Lang et al., 1988). Scales frequently ask whether the individual *considers himself* to be a violent person so he rates

himself as violent or non-violent. Many violent offenders think they are normal or they lie about themselves. However, when asked for objective behavior, such as, "How often do you hit your wife?", frequently they provide some number, although it is noteworthy that the more aggressive the crimes, the more frequently they lie about their behavior patterns (cf. Lang et al., 1988). Thus, the assessment of violence is complicated but it is a necessity and other sources of information than the offender should be examined.

The clinician will want to know if the client is generally violent or is so only in a sexual context. Is violence often associated with consumption of alcohol or drugs? Is the violence 'driven by' a biological abnormality, such as a tumor or endocrine disorders — e.g., is there possible organic brain syndrome (cf. Langevin & Bain, 1992)?

There are many problems in measuring violent tendencies reliably. To fully evaluate violence potential, all available documentation from sources other than the client should be obtained, if at all possible.

Neuropsychological Impairment

Neuropsychological variables are seldom considered important but research in the past decade suggests that brain damage and dysfunction among the paraphilic population are substantial. The relationship between learning disabilities, brain damage or dysfunction, and the presence of a sexual anomaly is not known as yet, but neuropsychological factors may interact in complex ways with behavior and may influence risk for recidivism and treatment outcome. Pedophiles, particularly, show language-based cognitive impairment that presents problems of comprehension, information retention, retrieval, and application in therapy and in their lives in general. In some cases, there is stimulus confusion as a result of a brain injury sustained in a car accident or other injuries that may lead to acting out, which is out-of-character with the rest of the individual's life.

A number of studies have indicated that pedophiles, among the child sexual abusers, have IQs that skew to the lower end of normal (cf. Langevin et al., 1991). There may be a significant spread between Verbal and Performance IQ on the WAIS-R (cf. Langevin et al., 199I). Pedophilies as a group tend to suffer neurocognitive deficits, as measured by

the Halstead-Reitan Battery and Luria Nebraska Neuropsychological Test Batteries (cf. Hucker, Langevin et al., 1988). There are structural anomalies, as seen on CT scans, particularly in the left anterior and temporal horns. The cortex, as well, shows significant asymmetry and less dense tissue, especially in the left frontal-temporal area of the brain (cf. Wright, Nobrega, Langevin & Wortzman, 1990). Other groups, such as exhibitionists, tend to show electrical abnormalities (Flor-Henry et al., 1988) and sexually aggressive men, particularly sadists, show dilitation of the right temporal horn in CT Scans, as well as neuropsychological deficits on the Haltstead-Reitan Battery, but to a lesser degree than the pedophilic offenders (Langevin et al., 1990).

Frequently, sex offenders have learning difficulties that create both negative attitudes surrounding new learning and direction from authority as well as problems with language-based comprehension. Langevin and Pope (1993), for example, found that 50% of pedophilies and 85% of aggressive sex offenders had repeated at least one grade in school. An examination of their expectations in therapy and their interpretation of therapy content was most revealing. They were often confused, misinterpreted content, and were frustrated by their inability to interpret what was said to them.

In a sample of 80 offenders released from federal penitentiaries into a community-based program, 58% showed learning deficits and were significantly impaired on the Halstead-Reitan Battery. Frequently, language-based difficulties were witnessed. Since most therapies are verbal in nature, such clients may not benefit from therapy content in spite of a motivation to change. Many cognitively-impaired individuals are seen as "treatment failures"; in effect, they were unable to learn because of the teaching methods used. Mentally reatrded offenders present special problems for assessment and treatment but they are manageable (Griffiths, Quinsey & Hingsburger, 1989).

It is possible that the neurocognitive deficits in sex offenders are related to some "accident" that has significance in the development of their paraphilia (cf. Freund & Kuban, 1993). However, to date no definitive evidence has been forthcoming to validate this claim, although epilepsy and brain damage, or dysfunction, may be significant in the genesis of unusual sexual behavior (Kolarsky et al., 1967; Langevin et

al., 1990). Biological factors should be suspected if there has been a change in behavior after a car accident, or in an elderly offender, or if the offender's sexual drive seems either to reflect sexual dysfunction (e.g., impotence) or excessive libido. One may also see individuals who have been in car accidents or other accidents that have affected the cortex. There may be gross confusion or disorientation, or a change in impulsivity that may lead to out-of-character sexual behavior. The rehabilitation and medical correction of these conditions obviously has a great significance in reducing their risk of recidivism (cf. Langevin & Bain, 1992).

Other Biological Abnormalities: The Endocrine System

Endocrine abnormalities have also been reported in sex offenders, particularly in pedophiles. Gaffney and Berlin (1983) and Bain et al. (1989) found that the GnRH test showed abnormalities in the hypothalamic-pituitary axis in the brain that may influence a number of factors including libido. Disturbances, such as diabetes or thyroid abnormalities, may be associated with behavior that mimics psychosis, with mood fluctuations, poor judgement, and confused sexual behavior (cf. Langevin & Bain, 1992).

Some endocrine factors can play a significant role in the genesis and maintenance of unusual sexual behavior. The presence of diabetes, for example, complicates treatment of sex offenders, unless it is managed properly. Like sex offenders, diabetics in general are resistant to treatment and frequently violate the medical treatment regimen that is proposed for them by their physicians (cf. Langevin et al., 1992). Men with thyroid abnormalities or parathyroid abnormalities may also show bizarre hyperactive patterns of behavior, lack of cooperativeness, or inability to pay attention in therapy. This may quickly change once this disease is treated.

Not everyone can afford a neurologist, or an endocrinologist on staff. However, it is always possible to have a general practitioner who will do sex hormone profiles, hormone challenged test (the GnRH Test), routine liver functioning, and routine blood tests to detect abnormalities in the endocrine and neurological systems. The Halstead-Reitan Battery is frequently used by psychologists to evaluate neuropsychological impairment. The Medical Screening Test (Bain & Sanders, 1985) can also be

- ***Table 2: A Sample of Psychological Tests Used to Assess Paraphlics and Sex Offenders***

Sex History and Preference

- *Freund Phallometric Test of Erotic Preference*
- *Clarke Sex History Questionnaire*
- *Freund Gender Identity Scale*

Substance Abuse

- *MAST*
- *DAST*
- *Drug Use Survey*

Mental Illness and Personality

- *SADS*
- *MMPI*

Violence

- *PCR*
- *CVS*

Neuropsychological and Biological Factors

- *WAIS-R*
- *Reitan Battery*
- *Medical Screening Test*

used to determine whether a physician should be consulted, if one is not already involved. Table 2 provides an overview of the instruments and methods used to assess each dimension.

PROFILING THE OFFENDER AND SETTING TREATMENT GOALS

Once information has been collected on sexual history and preference, substance abuse, violence, mental illness, personality, neuropsychological abnormalities, and endocrine factors, a treatment plan can be developed and risk to the community can be evaluated. The diversity of problems discussed suggests that a flexible treatment plan should be developed. In the case of physical abnormalities such as endocrine disorders or psychotic mental illness, a physician/psychiatrist should be involved to correct the condition before other treatments are started. It is not unusual for an individual to look completely different after medication. In some cases it is not possible for other treatments to be effective until these medical problems are dealt with first.

The individual who appears to have a paraphilic sexual preference can be treated differently from one who does not. In the case of incest offenders, for example, only 25% have an erotic preference for children (cf. Langevin & Watson, 1991), although this is still a significant number and an important predictor of deviant paraphilic preference. In the case of the individual who is attracted to children, Children's Aid Societies or the courts may decide that he should not have future contact with his own children or any children in unsupervised conditions. He will remain a risk for sexual offending against children and his sexually anomalous preference will have to be managed within relapse prevention therapy and/or controlled with sex drive reducing medication. The non-paraphilic individual who may have emotional, marital, and/or alcohol abuse problems may not remain at risk for sexual offenses. This is not to imply that there is a differential success in treatment outcome, rather that the two groups have different treatment needs. It appears unnecessary to reduce sexual arousal to children in an individual who is primarly aroused by adult females.

Substance abuse is also a factor that appears to get in the way of other behavioral changes. The cooperativen ess or ability of the client to focus on therapy issues may be marred by drunkenness or by the irregularity of therapy attendance. A drying out period of three to six months in a treatment setting while incarcerated may be valuable initially, other things being equal, to start on a firmer footing with other therapeutic methods.

Drugs most commonly used by sex offenders (e.g., marijuana) are not especially addictive and are not so readily available as alcohol. Thus, it may be easier to control their use. However, individual attitudes towards treatment, society, and the law, etc., may play a significant role in willingness to give up the drugs. Individuals who use more dangerous drugs, such as cocaine and amphetamines, require abstinence as soon as possible in the treatment process. A number of procedures have been used to deal with sex offenders that can only be mentioned here: behavioral techniques, relapse prevention, anger management, and assertiveness training have all been used effectively. They provide the sex offender with coping skills to effect positive change in his life. A thorough assessment with reliable and valid instruments is a first step to

showing that a satisfactory treatment program has been established for the client.

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