Sex Offender Treatment Project: Literature Review

Prepared for
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by the

Justice Center
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SEX OFFENDER TREATMENT PROJECT: LITERATURE REVIEW

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This literature review was prepared by students in my undergraduate research methods class as part of a project funded by the Alaska Department of Corrections to begin the process of establishing guidelines for the eventual evaluation of the sex offender treatment effort. The primary purpose of this portion of the project was to explore the literature pertaining to the treatment and recidivism of sex offenders. The other purpose for this project was to provide summary statistics from the DOC sex offender data base.

Although I sat with the students and we discussed their efforts, this is a fine example of the quality work our students can produce and they should be proud of their effort. Ms. Moeglein and Ms. Morgheim had taken the class before and each spent many hours assisting the current students and in making their own contributions. Ms. Moeglein also volunteered to create all of the SPSS syntax used in the statistical summary portion of the project. Ms. Morgheim took on the special responsibility of editing the final drafts of the literature review and deserves special recognition for a truly fine job.

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SEX OFFENDER TREATMENT PROJECT:
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INTRODUCTION

All correctional program evaluations, and particularly evaluations of sex offender treatment programs, are faced with a number of obstacles. Aside from the standard problems such as the need for evaluation resources, the internal politics and an "I need it yesterday" time period, there are all those features that once made the target program "better." Thus even the features of standard programs are modified here and there to accommodate unique administration structures, physical plants, staff, inmates, or perhaps even the weather. For whatever reason, most programs wind up being only distant cousins to their counterparts in other states or at other institutions.

The evaluation of a program usually begins by asking such questions as "Does it work?" or "Is it cost effective?" and may even include something specific such as "Does it meet our criteria for Goal A?" When we are asked if it works, we need to know what is the definition of "works," and when we are asked if it is cost effective we may need to ask "compared to what?" Thus, the initial questions generate a host of additional questions and answers that must first be addressed, considered, and then decided upon.

It is this latter point, the true beginning point of any evaluation to which this paper is addressed: what are the issued to be considered and how might they be addressed.

We have broken the literature review into sections which reflect the initial interests of the Department of Corrections officials involved, all of which are concerned with sex offenders and their treatment: recidivism, the issue of voluntary vs. involuntary treatment, various aspects of sex offender treatment, differences with respect to the various types of offenders, and, lastly, other factors associated with reoffense potential.

Any initial effort at such a comprehensive literature review concerning such a broad topic must be considered a temporary product reflecting most of what is current thinking, but quickly becoming dated as first this aspect and than that evolve to reflect ever-changing theory and practice

and, finally, new research. Therefore, what is unique about our programs must be put into a context that lends itself to current comparison and, hopefully, to future improvement.

A. RECIDIVISM

The study of recidivism with respect to sex offender treatment programs calls for the review of several areas of the corrections literature. Possible areas which need to be researched in order to assess the effectiveness of sex offender treatment programs are: the different working definitions of recidivism that are used in the literature, the differences in recidivism between sex offenders who have attended a treatment program versus those not treated, the optimal levels or types of treatment cited in the literature, and other factors possibly affecting recidivism.

Previous study of sex offender recidivism generally has not portrayed the sex offender as a serious recidivist. Sturrup (1968) wrote that " very few sex offenders recidivate with a new sexual crime " (p. 9). He also adds that "the sexual first offender is usually not dangerous and seldom relapses " (p. 6). This impression of the sex offender is also reported by Tappan (1971) and the majority of research reviewed by Amir (1971) and Groth (1982). However, recent research on sex offender recidivism provides a basis for questioning the accuracy of this impression. Many of the authors reviewed concluded that much of the confusion in research literature can be attributed to differences in measuring the recidivism of a sex offender.

Romero and Williams found in their research, that the concern with sex offender recidivism is exacerbated by evidence that very few sex offenders are permanently incarcerated (McCahill, et al., 1979). Ultimately sex offenders are returned to the community and little conclusive information is available on the risk they pose to society.

Marshall, et al. (in press) define recidivism as "failure rates which are typically derived from official records of rearrest or reconviction, and which report the percentage of men who reoffend (recidivism rates)" (p. 2). "In describing recidivism data we will rely on official records of offenses and we will only report re-offenses for sex crimes. . ." (p. 6). Berlin and Meinecke (1981) define

recidivism as "if the patient was accused of having, or admitted to having a deviant sexual contact . . . any occurrence of such behavior was scored as a relapse once treatment had been initiated, even if it did not come to the attention of the law as an official complaint" (p. 604). Romero and Williams (1983) used rearrest for a sex offense as their measure of recidivism.

Many problems arise when attempting to compare studies on the recidivism of sex offenders. There is no common standard by which recidivism is determined (Greenstein, 1990: 2). In a study presented in 1989 by Furby, Weinrott, and Blackshaw, several possible methods of defining recidivism were cited:

> . . . reconviction for the same type of offense; recommission of the same type of offense, even if [the offender] is not convicted for it; recommission of any sex offense, even if different from the original one; and recommission of any criminal offense, even if it is not a sex offense (p. 8).

The most widely used definition, however, is "conviction of another sex offense during a specified follow-up period" (Furby, et al., 1989: 21). Rice, Quinsey and Harris (1991) referred to recidivism as conviction of a new sexual offense, as well as any violent offense, including the time that has lapsed between the offense and reoffense.

The Romero and Williams ten-year follow-up study (1985) recognizes the prevalent usage of the Furby definition, but acknowledges the underestimation of the extent of recidivism due to lack of convictions (i.e., attempts, arrests, acquittals, plea bargains) after a sex offense. This study takes into account other variables as well, such as: the number of sex offense arrests and nonsex offense arrests, the amount of time that lapses between the first offense and reoffense, and the movement from one offense category to another. In researching both sex and nonsex offenses, Romero and Williams cite a difference in reoffense rates based on the type of sex offense. For example, exhibitionists are twice as likely to be arrested for any offense. Christiansen, Nielsen, Le Maire, and Sturrup (1965), also found that pedophiles and exhibitionists had the highest rate of recidivism. Another finding of Romero and William's study concluded that recidivism is just as likely, if not more, in the fourth year following an arrest as in the first year (p. 61). The variables that Romero

and Williams found important in predicting future arrests are age, income and number of prior arrests.

Frisbie and Dondis (1965, cited in McGrath, 1991) agree that the type of sexual offense is related to the probability of recidivism. They too found that exhibitionism has the highest reoffense rate, followed by sexual aggressors, and then by child molesters.

Grunfeld and Noreik (1986) do not state whether reoffense rates are based on convictions, arrests, or commission of a crime, but they do submit that any subsequent sex offense is recidivism. In their study, there was only a 12.8 percent recidivism rate for sexual crimes, whereas the recidivism rate of nonsex crimes was rather high. Twenty-four percent subsequently were convicted of crimes of profit and another 10 percent were convicted of crimes of violence (p. 101). Unlike the Romero and Williams study, Grunfeld and Noreik found that rapists are the most likely to sexually reoffend, occasionally with a lesser offense, although the common tendency in sex crime recidivism is commission of the same type of crime (p. 98). Hall and Proctor also confirm this in their 1987 study. Offenders against adults tend to reoffend with adults, while child offenders reoffend against children (p. 112).

Many of the studies dealing with reoffense note the unreliability of convictions and arrest records, indicating a need for a self-reporting system for sexual offenders (Hall & Proctor, 1987; Weinrott & Saylor, 1991; Groth, Longo, & McFadin, 1982). In these studies, sex offenders admitted to committing two to five times as many sex crimes, indicating that arrest records are not the most reliable measure of sexual reoffense. With a questionnaire of only five questions, Groth, Longo, and McFadin (1982) were able to learn that 67 percent of seventy-six known rapists had committed one or more undetected sexual assaults. Fifty percent of convicted child molesters had committed one or more undetected involvements with children (p. 456).

Voluntary data about sex and nonsex crimes was self-reported by ninety-nine sex offenders in a study by Weinrott and Saylor (1991). The median number of victims for 37 men arrested for rape rose from 1.8 to 6.0 victims when the men self-reported (p. 291). Also, the median number

of nonsex crimes reported by known rapists in the year prior to their commitment was 305 per man, almost one crime a day.

The nonsex offenses among this sample were strikingly high. Weinrott and Saylor (1991) argued that many of the nonsex crimes occurred in conjunction with a sex crime, or an attempt. They further found that under the circumstances it was difficult to support the notion that the sexual psychopath is primarily, if not exclusively, afflicted with a psychosexual disorder. Further validity studies need to address the possibility that men in treatment who are asked to report on past indiscretions might be more likely to divulge sensitive information than offenders sentenced to prison or probation without specialized treatment. All self-report studies to date have dealt exclusively with sex offenders involved in treatment. In addition, they have focused only on offenses prior to conviction. Further studies should also examine the degree to which men are willing to reveal illegal acts to an independent researcher while on probation or parole.

Romero and Williams (1985) found that most researchers agree that long-term follow-up is crucial in sex offender research, given the low rate at which the offenses of sex offenders are detected and prosecuted and the tendency of sex offenders to have crime-free periods. Short-term follow-up of sex offenders for 3 to 5 years is likely to miss the bulk of the recidivists and therefore may underestimate the extent of the recidivism. Research also needs to separate the different types of sexual offenders. Romero and Williams use the example of the pedophile's recidivism rate compared to the rapist's recidivism rate. If they are not separated, the result is a lack of information on the differences in recidivism between different types of sex offenders, which could invalidate research findings.

The study design used by Romero and Williams (1985) measured recidivism in two ways: the number of arrests for a sex offense and the number of arrests for a nonsex offense for each individual in the sample in the 10-year follow-up period. They were not successful in interviewing a large number of sex offenders in the sample; therefore, they were not able to comment on undetected offenses. They were also unable to obtain national arrest data on the offenders in the sample. The findings of their study are based on an analysis of the prior arrest records and

subsequent arrests for 231 offenders and also on the offender's criminal background and demographic factors associated with recidivism. Quinsey (1984) found that the longer the follow-up period, the greater the percentage of men who will have committed another crime.

After reviewing the recidivism literature, several generalizations can be made: first, there needs to be a definition of recidivism that will stand for all studies, even those willing to probe into nonsex reoffenses. Second, there is a difference in sex and nonsex reoffense rates based on type of sex offense. Third, until victims start reporting all counts of victimization, a more accurate form of data collection than just arrest and conviction records is needed. And lastly, an appropriate recidivism time period for each type of sex offense is needed. The wide variation in reported time periods for evaluation makes comparison nearly impossible.

This latter point raises the possibility that an alternative to the fixed recidivism window, namely survival analysis, may be the most efficient method of capturing the complex relationship between treatment and recidivism. A survival analysis of sex offender treatment data would address the question: "Does treatment extend the time between release and reoffense?" (Kalbfleisch, 1980; Lawless, 1982; Miller, 1981). A survival analysis avoids the overly simplistic recidivist/nonrecidivist dichotomy and provides a method for evaluating treatment effectiveness independent of a fixed, and perhaps artificial, follow-up time period.

B. TREATMENT -- VOLUNTARY VS. INVOLUNTARY, TREATED VS. UNTREATED

Although it seems likely that involuntary, court-referred sex offenders would be less optimum candidates for treatment than those volunteering for treatment, little documentation has been published on this assumption (Maletzky, 1980: 306).

Maletzky (1980) addressed the difference in outcome and compliance between self-referred and court-referred patients. This study consisted of 100 male patients divided into four categories: self-referred and court-referred homosexual pedophiles (p. 38), and self-referred and court-referred

exhibitionists (p. 62). There were no significant demographic differences among the groups. The definition of a self-referred patent was one who "entered therapy of his own accord without coercion from a legal source" (p. 308). Likewise, court-referred patients were those who "entered therapy under coercion from a legal source" (p. 308). The court-referred group was further divided into four groups: 1) those entering treatment as a condition of probation, 2) those entering treatment as a condition of parole, 3) those released by the court under conditions of obtaining treatment but not as a condition of probation or parole, and 4) those directed by their attorneys to obtain treatment prior to a court hearing (p. 308).

Treatment consisted of assisted covert sensitization, which pairs an aversive odor with scenes of the unwanted behaviors. Treatment involved weekly sessions for 24 weeks, followed by "booster" sessions every 3 months for 3 years. Follow-up assessments were completed. Follow-up assessments were completed at 6, 12, 18, 24 and 30-month intervals.

Treatment outcome measures were assessed by means of frequency records of self-reported behaviors and penile plethysmography records. Treatment compliance measures were the correspondence between the plethysmography recording and the self-report, observers' reports, attendance at treatment sessions, and legal records of any charges filed or convictions obtained against any of the patients in the study (Maletzky, p. 309-310).

There was a significant decrease in self-reported behaviors in all four groups, as measured by standard *t*-tests. However, the results showed no significant differences among the groups in covert and overt frequency records. No significant differences emerged according to the Chi-square analysis. The penile plethysmography records also produced no significant differences in the groups.

Under the treatment compliance measures, the correlation between plethysmography ratings and self reports also revealed no significant differences between groups. A slightly better compliance from observer reports was indicated in self-referred versus court-referred, but still no significant difference was found. Attendance was slightly higher among court-referred than self-referred patients, but this difference was slight and showed no significant difference.

Of 100 patients, there were only 11 unspecified legal charges, involving 8 patients over a 36-month period. There were no significant differences among the sub-groups, but the small numbers in the groups may have been a problem. Except for a slight superiority of response in the self-referred versus the court-referred groups, there were no significant differences in court-referred and self-referred compliance and outcomes. Limitations of the study included difficulties in evaluating the validity of verbal reports from patients and observers, and the questionable validity of plethysmography measurements, since penile responses can be inhibited or exaggerated (Maletzky, p. 314, quoting Rosen, 1976).

A more recent "meta-analysis" reported by Alexander in a November, 1993 speech, compared 63 sex offender studies. One issue she focused on was a comparison of recidivism for subjects in mandatory and voluntary treatments. Based on 17 studies with 1470 subjects, those receiving mandatory treatment had a 10.5 percent recidivism rate, while those voluntarily receiving treatment (based on 29 studies with a total of 2,296 subjects) had a 12.4 percent recidivism rate. Since the rate was only slightly lower for mandatory treatment, Alexander suggests that legislating treatment would probably be beneficial (Alexander, 1993, p. 11).

The 73 treatment programs surveyed by Sapp and Vaughn had a mean length of treatment of 18.4 months, with a range of 6-66 months, a median length of 14.8 months, and a modal length of 12 months. Eleven percent of the treatment programs were mandatory, 63 percent voluntary, and 26 percent combined (mandatory and voluntary).

McGrath (1991) stated that insight-oriented psychotherapies alone are not effective in sex offender treatment. Most programs used a combination of psycho-education (sex education, sex assault cycles, victimology), cognitive-behavioral therapies, and family-system intervention. Relapse prevention strategies and intensive probation supervision also proved promising. Several studies identified three factors necessary in determining amenability to treatment: 1) Offender must acknowledge he committed the offense and accept responsibility for his behavior; 2) Offender must consider his sexual offending a problem that he wants to stop; and 3) Offender must be willing to

enter into and fully participate in the treatment. A written treatment contract and informed consent are necessary for treatment (McGrath, p. 329).

Marshall and Barbaree (1988) as cited in Becker and Hunter (1992) looked at recidivism rates of treated and untreated pedophile offenders. The offenders were categorized based on incest, non-familial female children and non-familial male children. Then each group was divided into a treatment and non-treatment group. The treatment was multifaceted and included electrical aversion, masturbatory reconditioning, smelling salts paired with deviant fantasies and skills training. Penile plethysmograpahy was used to measure arousal levels. Overall, 13.2 percent of treated and 34.5 percent of non-treated recidivated, although what constituted recidivism is not defined (Becker & Hunter, 1992: 87). The breakdown based on offense rather than treatment was as follows: 8 percent incest, 17.9 percent non-familial female and 13.9 percent non-familial male recidivated (p. 87). Recidivism was measured by official and unofficial data, what data were used is not clear.

C. TREATMENT -- TYPES, LEVELS, EVOLUTION, RELAPSE PREVENTION AND COST/BENEFIT ANALYSIS

1. Types and levels of treatment

Society's treatment of sex offenders has moved from the early desire to cure those afflicted with an insane desire to commit heinous crime, to the general goal of management and control of sex offenders (Marques, 1991). The different level on which sex offenders are treated is based on the types of crimes committed, legal status and case disposition, amenability to treatment, and availability of treatment programs for sex offenders (Marques, et al., 1991; Furby, Weinrott & Blackshaw, 1989; Antonwicz & Valliant, 1992; Berlin & Meinecke, 1981).

The notion that sex offending is a curable illness is on the wane and methods of slowing the rate of recidivism through behavior modification are on the increase. Generally the feeling of

treatment specialists is summed up by a Canadian report on *The Management and Treatment of Sex Offenders* (1990): "Medical science is still uncertain as to the kind of treatment that may be effective, but it is obvious that effective treatment can only be discovered if such persons are made the subjects of special study" (p. 5).

There are four types of therapeutic approaches, of which three are acceptable in the United States. The four fields are: psychotherapy, behavioral therapy, biological therapy, and medication therapy. All four types of therapies have supporters and detractors, but castration and psychosurgery stand out from the biological therapies because of the strong opposition to these possibly unethical and invasive techniques (Berlin & Meinecke, 1981; *Management and Treatment of Sex Offenders*, 1990; Heim & Hursch, 1979).

Psychotherapy was the original treatment used for sex offenders. Psychotherapy is a process involving introspection by the sex offender to control undesirable behavior. It is thought that verbal interaction, which requires the sex offender to openly discuss past deviant sexual experiences and the needed changes that must take place in his life, is the essence of psychotherapy (Baker, 1984). Treatment models include: individual and group counseling, family therapy, milieu therapy, victim empathy, female identification, accountability, sexual education, reality therapy, psycho-drama, victim confrontation, value clarification and cognitive therapy. Evaluating the results of psychotherapy is complicated and there are no common standards of measurement (Becker & Hunter, 1993). Many have reported disappointing results when psychoanalysis or psychotherapy are the sole treatment, especially in cases of deviant sexual behavior. Psychotherapy is not always conducive to the prison setting. It requires the offender to be fairly intelligent, have a "capacity for abstract thinking and self-observation, . . . a sense of distress and motivation for change, and an ability to form a working relationship with a therapist . . . that may extend a long period of time and that may involve considerable emotional discomfort and frustration" (Baker, quoting Groth, 1979).

An additional study conducted by Becker and Hunter (1993) indicated success with a method in which a 20-year-old bisexual male pedophile was successfully treated with hypnotic uncovering techniques. Results showed a significant decrease in erectile response to pictures of female children,

and the patient self-reported a decrease in sexual arousal to children. However, long-term follow-up results were not reported (p. 83).

Family therapy, another form of psychotherapy, has been useful for treatment of incest offenders. The goal of this community-based treatment is maintaining family integrity, utilizing a combination of individual therapy with group therapy and self-help groups. One study found no recidivism in 600 families who received a minimum of 10 hours of treatment (Becker & Hunter, 1993: 83).

Behavior modification treatments apply learning theory in an attempt to extinguish undesirable behavior and replace it with socially approved responses through classical conditioning, operant conditioning and modeling. All of these methods involve changing the offender's deviant arousal patterns. Methods included in this category are: assertiveness training, aversive conditioning, biofeedback (plethysmography -instrument for measuring penile tumescence), covert sensitization, masturbating satiation, modeling-roleplay, orgasmic reconditioning, relapse prevention, relaxation/anger management, social skills acquisition, systemic desensitization, thinking errors and thought stopping (Sapp & Vaughn, 1991: 59).

Antonowicz and Valliant (1992) maintain that "cognitive-behavioral" treatment models hold the most promise for treatment of sex offenders. This model was developed from research indicating that sex offending results from an "interaction of socioeconomic, cognitive, behavioral and emotional variables." Programs have become multi-dimensional and target deviant sexual arousal patterns and cognitive distortions as change agents (p. 222). In their study of a five-week therapeutic program in Ontario, Antonowicz and Valliant evaluated the effects of cognitive-behavioral theory on four offender types: rapists, incest, molesters and non-sexual assaulters (control group). The results of the treatment showed a significant increase in self-esteem in rapists, with a moderate increase for the incest and child molestation groups. Anxiety of inmates also decreased, and it appears that sexual types may be associated with personality style (p. 229). These findings suggest that a cognitive-behavioral approach may be effective with this population.

The promise of these types of programs is that offenders are learning skills to recognize the chain of events and specific risk factors that have led up to their offenses. This method of treatment allows the offenders to interrupt the chain of events in order to avoid reoffense (Marques, 1991). While Furby contradicts the claims of effectiveness of all types of treatments, she does not disallow the possibility that with an increase of resources and attention the problems of sex offender recidivism may be properly addressed (Furby, Weinrott & Blackshaw, 1989).

The organic treatments tend to be the most controversial. These treatments manipulate hormone levels in order to alter the offender's libido. Research indicates that the level of the male hormone testosterone can affect sexual aggressiveness. Reduction of the hormone can be accomplished by surgical castration, drug therapy (antiandrogens and hormonal agents), and stereotaxic neurosurgery.

Castration -- surgical removal of the testicles, which produce 95 percent of testosterone -- does appear to have a substantial effect on recidivism (Bradford, 1988: 194). Many European studies have shown that castration significantly reduces recidivism. In a Danish study of 1,000 castrated sex offenders, the recidivism rate after treatment was 2.3 percent (Baker, 1984: 381). A 1973 Swiss study by Cornu compared a group of 127 castrated sex offenders with a recidivism rate of 7.44 percent to a control group of non-castrated sex offenders who had a 52 percent recidivism rate (Baker, 1984: 383).

Castration has been used in Europe since 1906 as a treatment for sex offenders. Until 1970, surgical castration was compulsory in post-war Germany. New interest in the procedure is also arising in the United States. In 1990, legislatures in Alabama, Indiana and Washington hotly debated introduction of bills reinstituting the procedure for sex offenders. In 1992, a convicted rapist in Texas requested castration as an alternative to imprisonment. The judge initially agreed, but withheld approval due to public outcry and the inability to find a doctor willing to perform the surgery (Peters, 1993). Roberts and Sluder (1993), evaluated this option for sex offender treatment, and found it failed to satisfy any of the four commonly identified goals of sentencing: deterrence, retribution, incapacity and rehabilitation. They concluded, "It is an unacceptable sentence that is

used largely because of social and political pressures operating within an emotionally charged environment" (p. 187). This drastic treatment is only used for control of extreme sexual aggression or in case of perceived poor prognosis and dangerousness.

Psychosurgery (stereotaxic hypothalaotomy) is a surgical procedure for controlling deviant sexual behavior by destruction of areas in the brain which regulate sexual activity and interest. Since 1962, Germany has used this procedure. Critics contend that this treatment is the "product of a 'one-sided biological conception of human sexuality and sexual 'deviation'" and that its proponents "ignore[s] the basic psychodynamic, learning theory, and sociological knowledge of the origins of sexual behavior" (Baker, 1984: 398). According to the study done by Sapp and Vaughn (1991: 63), castration and stereotaxic neurosurgery are not currently used or desired by treatment providers in the U.S.

Medication therapy includes the historical use of estrogens administered orally or by implantation to curb the desire to continue sexual deviancy (Murray, 1987). Main drugs in this field include Cyprotene Acetate (CPA), which suppresses physiological sexual response and libido, usually within two to four weeks after beginning treatment (Murray, 1987). Medoxyprogesterone Acetate (MPA), more commonly known as Provera in its pill form and Depo-Provera in its intramuscular injection form, is known for its ability to reduce the sex drive in under two weeks from the beginning of treatment (Murray, 1987). The drug therapy can produce negative side effects, such as weight gain, headaches, insomnia, fatigue, depression. The effects of both MPA and CPA are relative to the levels at which it is administered. More of either drug does not necessarily mean deviancy will be reduced, but rather the possibility of side effects increases. The text suggests that duration of treatment is not known due to lack of long term studies (Murray, 1987).

Some of the programs surveyed by Sapp and Vaughn (1991) used Depo-Provera, while others used androgens (CPA, or Cytoproterone Acetate). Fred Berlin, director of the National Institute for the Study, Prevention and Treatment of Sexual Trauma, prescribes CPA for patients referred to him by the courts. He says the drug is not a cure-all, but "dous[es] the fire of obsessive sexual thoughts, so that counseling and psychotherapy can get at the causes of the disorder" ("A Shot

in the Dark", 1993). The courts have ruled that offenders cannot be forced to use the drug, and it could be considered "cruel and unusual punishment" ("A Shot in the Dark" 1993: 22). However, this drug treatment is gaining increased judicial acceptance and will become an important addition to the treatment of certain sex offenders. Depo-Provera poses few legal and ethical issues when given to fully informed individuals on a voluntary basis (Peters, 1993: 327).

So, of the three types of acceptable treatments (biological excluded) medication and behavioral therapy are the most widespread and well-respected treatments known. Of these two we may conclude that although each has their respective place and cases, behavioral therapy, especially the relapse prevention programs, appear to have the greatest potential for success.

2. Types of Treatment Pre- and Post-1980

Ideas regarding the treatment of sex offenders have moved from the view that punishment was the only response to an act viewed solely as criminal towards the idea of "curing" offenders of their mental illness through psychotherapy (Marques, 1991). The move towards "curing" sex offender's mental illnesses tapered off during the late 1970s when results from psychotherapy programs were not showing the promise once hoped. Many suggested that these early types of therapy did not reduce the amount of recidivism (Dix, 1976; Frisbie, 1969 as cited in Marques, 1991).

Past treatments of sex offenders focused on the illness, not the cause of the problem. One program that operated from the late sixties to the late seventies was the Reeducation of Attitude and Repressed Emotions (ROARE). This program was developed by clinical psychologist William Prendergast. This treatment focused on encouraging its members to act out their aggressions by yelling, screaming, and thereby addressing the problems which caused them to be sex offenders (Serr, 1974). This type of treatment is unusual in that it began to address the problems which led up to the crime itself, whereas other programs insisted on "curing" the problem through drugs, electroshock, castration, and other all-or-nothing solutions (Berlin & Meinecke, 1981; Heim & Hursch, 1979).

The success rates of these early programs were measured by asking the treated offenders whether or not they felt like committing any more crimes. While studies of the early treatment plans focused on the immediate outcome, recidivism rates for the long run were virtually ignored or the experimental groups were so small that generalizations were not possible (Murray, 1987; Romero & Williams, 1983; Berlin & Meinecke 1981). Sturrup found that the first-time sexual offender is generally not dangerous and seldom relapses (1968, as cited in Romero & Williams, 1985). This view has been discarded by most, if not all, in the field of sex offender therapy. The general consensus now is that the first-time offender can be dangerous and has a relatively high probability of recidivating; therefore treatment should be a minimum requirement of any sentence.

Post-1980s treatment has been overwhelmed with the need to measure and show success rates in changing sexual deviants habits. From this foundation many treatment models begin with the suggestion of follow-up periods of longer than the standard three-to-five years. The protection from relapses succeeds by making the offender aware of the steps which led them to the problem in the first place (Pithers, et al., 1988).

3. Relapse Prevention Techniques and Their Benefit to Society

Relapse Prevention (RP) is a self-control program for the treatment of addictive behaviors. RP is specifically designed to help clients maintain control over their problem behaviors in all situations (Pithers, et al., 1988). The use of RP techniques helps the offender focus on the big picture and not the immediate gratification gained from committing a sexual act. The program also prepares the offender for these relapses by showing them how to avoid problem situations from the beginning.

The Department of Mental Health in California developed a plan which modified the RP program to specifically suit sex offenders by predicting what type of problems a sex offender will likely encounter when released from prison (Marques, 1991).

The RP program as outlined by Pithers, et al. (1988) conceptualizes the problem of recidivism in the "Downtown Reno" scenario (p. 249). A man who has a problem with gambling takes a vacation to California and decides to see the "amazingly blue waters of Lake Tahoe," thereby leading himself into the high-stress situation of being in a gambling town (p. 249). RP for sex offenders focuses on the offender staying away from the persons and/or situations which caused them to get into trouble the first time (Marques, et al., 1991; Pithers, et al., 1988). For example, a homosexual pedophile is not supposed to go play stick-ball with a group of young boys because that action puts him in a high risk situation.

Pithers, et al. (1988) stress that treatment does not end with formal therapy -- maintenance is forever: "The client who has adequately learned the RP philosophy will continue his own therapy everyday for life."

The effectiveness level of RP is blurred, not by its own treatment methods, but by the definition of recidivism and the problems of measurement after the treatment. The short-term follow-up studies indicate that the treatment works well and should be studied further by following up the patients in the program over a period of more than three years and even beyond the ten years suggested.

4. Cost of Treatment Programs Mentioned in Literature

Few methods of treatment have price tags which are discussed in the material. However, Pithers, et al. (1988) state that their program of treating sex offenders is "highly cost-effective" (p. 258). With Pithers's figure of $60,850, which was appropriated for fifteen outpatient therapy groups, as the only number found for this type of program, no generalizations concerning cost can be made.

Prentky and Burgess (1990) outline the costs of treating an offender and the relative risk of their reoffending compared to just the cost of incarcerating an offender and their probability of reoffense. Since Prentky and Burgess use 25 percent as the recidivism rate for treated offenders and 40 percent for untreated offenders the cost of one untreated offender multiplies faster because of the number of reoffenses. So, the smart money is on treating all of the offenders because the costs of reoffending will add up over time.

D. TREATMENT AND RECIDIVISM AS IT RELATES TO VARIOUS TYPES OF SEXUAL OFFENDERS

Prentky and Knight (1991) define rapist as "a man who sexually assaults a victim who is 16 years or older" (p. 643). According to Becker and Hunter (1992), pedophiles are "adults who have

urges and fantasies involving sexuality with prepubescent children and have either acted on these urges or are distressed by them" (p. 75). Berlin and Meinecke (1981) discuss sexual deviation disorders called parphilias and state they are syndromes which have three common threads: "recurrent sexual fantasies, . . . intense associated cravings, . . . and stereotypical behavioral responses" (p. 601, abstract). The types of fantasies, and responses to them, determine the classification of paraphilias such as pedophile or exhibitionist. Romero and Williams (1983) defined four subpopulations of offenders in their comparison of probation coupled with group therapy and intensive probation alone. These are homosexuals, exhibitionists, pedophiles and rapists, yet these terms are not themselves defined.

Another study by Hall, Shondrick and Hirschman (1993) categorizes by subtypes. They found four different subtypes of sexual aggressors: physiological, cognitive, affective, and developmentally-related personality problems. These appear to be determined primarily by the amount of lack of violence and planning. While many pedophiles may fall into the physiological subtype, they will be found in the others as well. This example illustrates that these subtypes are generalities about sex offenders and are not all inclusive.

Berlin and Meinecke (1981) propose medical treatment for sexual offenders. Thirteen of twenty subjects were pedophiles; the rest ranged from exhibitionists to rapists. Only three of the twenty relapsed while taking medroxyprogesterone acetate (MPA), yet eleven of those same twenty dropped out of treatment and of those ten relapsed. MPA appears to work well with offenders whose problems are limited to "unconventional sexual cravings" and continue to take the medication. There is some evidence that cognitive/behavioral therapies in addition to MPA are advantageous (Beck & Hunter, 1992; Kilmann, et al., 1982; Schwartz, 1992). However, MPA is not successful with these same subjects if they also abuse drugs and alcohol or with subjects who are sexually impulsive, sociopathic or violent (Berlin & Meinecke, 1981).

Becker and Hunter (1992) focused on treatment of male pedophiles. They found 3 types of organic treatment covered in the literature: antiandrogens and other hormonal treatments, surgical castration and stereotaxic neurosurgery. Castration results in low recidivism rates yet no conclusive

scientific or ethical reasoning for use with sex offenders has been uncovered. Castration is not used in the United States and it is doubtful that it will be allowed any time soon.

MPA and cyproterone acetate (CPA) both inhibit sexual drive and subsequent sexual behavior. Becker and Hunter (1992) conclude that while MPA may be successful in "reducing sexual drive and fantasies" in some parphilias, MPA has no impact on sexual orientation. They suggest MPA may be used successfully in conjunction with behavioral therapies.

In a study by Bradford (1988), cited in Becker and Hunter (1992), CPA was found to lower testosterone levels. This may reduce sexual drive and give greater control over suppression of undesirable sexual arousal. The Bradford study did not control for type of offender nor did it provide recidivism data.

Becker and Hunter (1992) cited a study by Lang, Pugh and Langevin (1988) which reported on incest offenders and heterosexual pedophiles looking into their response to "group therapy" which included a wide variety of techniques. Recidivism was derived from information obtained from several different agencies; however, the exact measures used are unclear. The results were 18 percent of pedophiles and 7 percent of incest offenders reoffended (1992: 83).

Behavioral techniques used on pedophiles have had some success. According to Beck and Hunter (1992), the most frequently used behavioral treatment is aversion therapy. In a study by Kelly (1982) as cited in Beck and Hunter (1992), aversion therapy significantly decreased urges and behaviors in 79 percent of subjects. Unfortunately, self report was the only form of data from which to determine recidivism and the time between treatment and follow-up is not included.

A comparison of probation-plus-group therapy and intensive probation alone was done by Romero and Williams (1983). They conducted a 10 year follow-up study and found that 13.6 percent of offenders who participated in the group therapy coupled with probation and 7.2 percent of offenders in the intensive probation-only group recidivated (p. 39). The measure of recidivism was rearrest for a sex offense. They also gave recidivism percentages according to type of sex offender: 10.4 percent assaulted (rapist), 6.3 percent pedophile and 20.5 percent exhibitionist (p. 40). Apparently, these percentages included all types of therapy. However, they point out that of

the 26 recidivists in their follow-up, 10 did not complete the entire 40 weeks of probation with group therapy. According to Romero and Williams, "past criminal behavior is the best predictor of future criminal behavior" (p. 40). Romero and Williams concluded that there was no significant difference in the two groups even though the intensive probation group had slightly lower recidivism rates.

Hall, et al. (1993) state that our inability to find effective treatment for sexual offenders may be due to the fact that one type of treatment may be effective in treating certain types of offenders but may not work as well with others. They suggest matching treatments with four subtypes. The first subtype mentioned is physiological sexual aggressor. The main motivation for these individuals appears to be deviant sexual arousal; this is especially common in pedophiles. The most widely used treatment with this group is aversion therapy. Hall, et al. report that recidivism findings from studies using behavioral techniques for treatment of pedophiles are mixed.

The second subtype, cognitive sexual aggressors, are noted for their "deliberate planned nature." Hall, et al. (1993) suggest that incest perpetrators and acquaintance rapists are two offenders commonly found in this subtype. The treatment they recommend is victim empathy training and relapse prevention. Hall, et al., mention a study by Pithers and Cumming (1989) in which relapse prevention was used along with behavioral therapy. The recidivism rate for pedophiles over a six-year follow-up was 3 percent of the 147 subjects (1993: 65). Here the success cannot be attributed to the relapse prevention because it was paired with another treatment.

Hall, et al. (1993) refer to the third subtype as affective sexual aggressors. These have common attributes of impulsivity, violence, anger, and depression. Hall, et al. suggest pharmacological interventions will help to stabilize offenders so that cognitive-behavioral therapies can be used to treat the distortions in thinking patterns. They cite a study by Holon, Shelton and Loosen (1991) for this approach, but this study did not include sexual aggressors so it may not be generalizable to this population.

The fourth subtype deals with developmentally disabled populations and is not within the scope of the research here.

Schwartz (1992) studied the effectiveness of treatment on sex offenders. In her article she cites a study by Andrews (1990) which lists three criteria useful in predicting whether a treatment is successful. They are "delivery of service to higher risk cases, targeting of criminogenic needs, and use of types and modes of treatment (e.g., cognitive and behavioral) that are matched with client need and learning style" (1992: 315). The current trend seems to be that in order for programs to be successful they will have to meet the specific needs of the offenders. No longer will grouping all offender types into one form of treatment be an acceptable way of treating sexual offenders.

According to Prentky and Knight (1991), rapists are a very diverse group of offenders and yet they are often considered to be homogeneous when it comes to treatment. Before effective treatments can be found researchers must determine the "theoretically relevant and empirically validated variables" (p. 644) which will reduce the heterogeneity of rapists. Prentky and Knight say that recidivism rates are so high because rapists have not been properly assessed. They believe treatments are ineffective because rapists are treated as a homogenic group when they are not. The comparative analysis done by Prentky and Knight found that the most common subgroups of sexual offenders discussed in the literature were based on the following dimensions: "the amount of aggression, the presence or absence of antisocial personality, sadism, and sexualization" (p. 644).

Prentky and Knight (1991), use hypothetical taxonomic models in their attempts to differentiate between rapists. Rapists should be assessed to determine which typology they fit so that a more effective treatment can be administered. First, aggression is rated as high or low; if the offender is rated high, then he is assessed for the presence or absence of sadism. If aggression is found to be low the offender is checked for the presence or absence of antisocial personality. If antisocial personality is absent the offender is assessed for the absence or presence of sexualization. Treatment should be determined by the outcome of these assessments.

Bradford (1988) looked at studies which monitored the effectiveness of the drugs, MPA and CPA. MPA is useful in treating sex offenders, but the effects on sexual aggression are not clear. CPA is documented to significantly reduce recidivism rates.

McConaghy, Blaszczynski and Kidson (1988) did their study in Sydney, Australia. Thirty offenders were randomly assigned to one of three treatment groups. Ten received MPA, ten received both MPA and ID. The treatment was voluntary and the breakdown of offenders was as follows: 12 exhibitionists, 15 pedophiles, 5 fetishists, 4 transvestites and 3 voyeurs. Some of the offenders had two or more paraphilias which accounts for the total adding up to more than thirty; however we do not know which offenders were diagnosed with more than one offense. Self-reporting showed no significant differences in the amount of reduction in the strength of anomalous urges. Twenty-five of thirty reported reduced urges after one month of treatment. Only three of the remaining five underwent additional treatment. At a two-year follow-up, three of the twenty-five had relapsed (undefined), one from the ID group and two from the MPA group.

Marshall, et al. (in press) report that psychosurgery has a 26 percent failure rate with sexual offenders (p. 7). Castration in Europe showed low recidivism rates, below 7 percent after a twenty-year follow-up (p. 8). However, many were first time offenders and did not control for offense type. Castration reduced the frequency of "sexual activities and thoughts and arousability" (p. 8). The authors suggest that MPA works best in conjunction with psychological treatment. The offenders with clearly identifiable paraphilias such as exclusive arousal and deviant sexual fantasies seem to benefit more than other types of offenders from MPA. MPA does not appear to work well with offenders who abuse drugs, who use violence in the perpetration of the offense or those who are diagnosed as having antisocial personalities. High dropout rates are reported due to side effects. The reported recidivism rates were between 17 percent and 30 percent for MPA although the length of follow-up is not documented (p. 10).

Marshall, et al. (in press) also discussed a cognitive behavioral program in Canada which based recidivism on official records. Inmates near the end of their sentence volunteered for the program. Results showed recidivism rates of eleven percent for treated and 35 percent for untreated inmates. The program appeared to have better results with pedophiles than rapists. A cognitive behavioral outpatient program had the same results in that it was found to be most effective with child molesters and exhibitionists. Self-help humanistic group treatment worked well with incest

offenders. Less than one percent recidivism (undefined) was reported in the follow-up period (which is not specified).

Kilmann, et al. (1982) reviewed the literature on sex offenders. The authors organized their review by first looking at studies whose subjects were homogeneous and then at studies whose subjects were heterogeneous. They mentioned that in the studies they covered the following outcome measures were used: re-arrest, reduction of fantasies, follow-up interviews, behavioral observations, MMPI scores, card sort scores, mood scores, and penile response.

The same authors discussed studies ranging from 1966-1978 of exhibitionists who were treated with behavioral or cognitive therapies. Seventeen of 21 studies (15 were single case studies) reported some of the follow-up procedure; the most common being self-report measures. The time periods ranged from unspecified up to five and one-half years. All studies reported success. The behavioral techniques produced results faster than traditional psychotherapy.

Fetishism was also included in the review by Kilmann, et al. (1982). They reported on 11 single case studies, where the most common form of treatment was some form of aversion therapy. Follow-up time ranged from 0-22 months. The most widely used measure was self reports, in addition, three of the studies used penile response measures.

In looking at pedophiliacs, Kilmann, et al. (1982) reported on 11 studies. Nine of them were case studies, one experimental without a control group and one double blind study. Most of the studies used multiple forms of treatment. All reported success to some degree but not with all subjects and not by all measures. Follow-up periods ranged from unspecified to three years. Behavioral types of treatment appear to be the most effective with this type of offender.

Based on the literature reviewed here, the general consensus seems to be that there are many different types of treatments and many differences in the needs of offenders. Treatments need to be matched to the type of offender in order for the treatments to be effective.

E. OTHER FACTORS POSSIBLY INVOLVED IN REOFFENSE POTENTIAL

Popular belief suggests that family ties and/or social bonds mitigate against criminal behavior. Rowe, Lindquist, and White (1989), in a survey of 1,993 adult males and females, found that people are more concerned about losing their family's respect than about being arrested or even imprisoned. Rowe and his colleagues concluded that these findings point to a strong effect of the bonding process, within the family, in preventing adult criminal behavior. They suggest that the importance of family relations may play a more significant role in deterring crime than criminal sanctions.

The Gluecks (1937: 205-206) theorized that a successful marriage sometimes brings a criminal career to an end. McCord, et al. (1959: 161) suggested that marriage is a new source of prestige in the adult world, as are children, and may influence a criminal to end such behavior.

A number of articles have indicated that strong family relationships are beneficial for prisoners (see Holt & Miller, 1972; Brodsky, 1978; Peck & Edwards, 1977; Nash, 1981; Swan, 1981). Researchers have explored the connection between maintenance of family and community ties during imprisonment and post-release success. Holt and Miller (1972), in a post release, follow-up study, found that two percent of the parolees who had three or more different visitors during the year prior to parole returned to prison, whereas 12 percent of those who had no contact with family or friends returned to prison within a year.

CONCLUSION

The literature review was not designed to create definitive answers but, rather, to provide Department of Corrections policy makers with an exposure to the rich array of possibilities. A literature review should guide the evaluator and suggest definitions and procedures which are appropriate to those unique features which characterize all programs. Several general conclusions are clear, however.

First, the concept of recidivism is extremely complex, varying not only by definition of the reoffense event but also tied to the time period of the follow-up, the type of offender, and even the type and length of program employed. Every program discussed here has had failures, and it would be foolish to demand total success from our efforts. However, the definition of "does it work?" must somehow be tied to this ratio of success and failure.

Second, it appears that involuntarily treated inmates experience some benefit from treatment and that benefit has the potential of rivaling that of the volunteer group. However, one may need to vary the standard treatment to achieve this rival benefit.

Lastly, the issue of cost must include a discussion of the costs of not treating, and those costs may well extend into the larger, post-release society of the offender. New ways of understanding this relationship to costs, i.e., survival analysis, may be needed and explored. Whatever the final decision concerning the definitions employed, good research -- good evaluation -- should be a necessary precursor to good public policy.

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