Cognitive-Behavioral Treatment of the Paraphilias

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ABSTRACT

Background: Sexual offenders continue to occupy the public’s attention; a significant proportion of this population is diagnosed with paraphilias. Cognitive-behavioral treatment has been the mainstay of treatment for sex offenders and for the paraphilias for the past three decades. This article will review the history of cognitive-behavioral therapy, its techniques, and its efficacy.

Method: A literature review was conducted of PubMed and PsychInfo Databases.

Results: A significant literature exists describing cognitive-behavioral therapy and presenting outcome studies and meta-analyses evaluating its efficacy.

Limitations: This study is based on a literature review and influenced by the knowledge and biases of the authors.

Conclusions: Cognitive-behavioral therapy is the most prominent therapy for sexual offenders. Although reports from individual programs and meta-analyses support its efficacy, overall, the strength of the evidence base supporting this therapy is weak and much more empirical research is needed.

BACKGROUND

Public concern about sexual offenders has escalated. A significant proportion of this population has been diagnosed with paraphilias (1). The essential features of a paraphilia are “recurrent, intense, sexually arousing fantasies, sexual urges, or behaviors generally involving 1) nonhuman objects, 2) the suffering or humiliation of oneself or one's partner, or 3) children or other non-consenting persons that occur over a period of at least 6 months (Criterion A)” (2, p. 566). A reduction in sexual offending will depend on the ability of clinicians to identify the most effective treatments for this population. Currently the most widely recognized treatment for sexual offenders and paraphilias is cognitive-behavioral treatment, including relapse prevention (2-6). This article will review the theoretical base for cognitive-behavioral therapy, describe the specific techniques used, present information on efficacy, reviewing major reports from specific treatment programs and meta-analyses, and discuss limitations of the current evidence base. Suggestions for future directions will be offered.

METHOD

A literature search was conducted on the non-pharmacological treatment of the paraphilias using PubMed and PsychInfo databases from the years 1990 through April of 2011. The non-pharmacological treatments emphasized cognitive-behavioral therapy and relapse prevention therapy. The PubMed search included any pertinent Cochrane Reviews. The search used search terms of “paraphilias,” “exhibitionism,” “voyeurism,” “frotteurism,” “sadism,” “masochism,” “fetishism,” “transvestic fetishism,” “paraphilia-related disorder,” “paraphilic coercive disorder,” and “paraphilic rape.” In addition, the authors reviewed secondary references, textbooks, and textbook chapters. Relevant literature was selected and reviewed.
RESULTS

HISTORY OF COGNITIVE-BEHAVIORAL THERAPY
In a recent review (5, 6) of behavioral and cognitive behavioral approaches to sexual offenders, Laws and Marshall concluded (p. 110): It is evident from this review of the history of sexual offender treatment that cognitive behavioral procedures have developed into a comprehensive approach that is widely shared and appears to be effective. The breadth of treatment targets has progressively increased and research has been implemented to evaluate the basis for these expanded targets. Theoretical and classification efforts have moved in harmony with both the expansion of treatment programs and the associated generation of research.

Social learning theory approaches have been cited as important contributing factors in the development and maintenance of paraphilic sexual interest; the importance of conditioning is emphasized over intrapsychic processes (7). Behavior therapy interventions for this population were originally derived from Pavlov’s classical conditioning (8) and Skinner’s operant conditioning (9) and used to attempt to modify sexual preferences (10). According to McGuire, Carlisle and Young (11), “The theoretical basis for such treatment, as for all behavior therapy, is that the symptom or behavior to be treated has been learned at some time in the past and can be changed by the learning of a new pattern of behavior” (p. 185). Thus, the goal of treatment is to reduce inappropriate sexual arousal and increase appropriate arousal (12).

DESCRIPTIVE OF TECHNIQUES

Decreasing Inappropriate Arousal
The principle treatment approach of behavior therapy for paraphilias is to eliminate the pattern of sexual arousal to deviant fantasy by assisting the patient with decreasing inappropriate sexual arousal. A variety of techniques that have been used have been reviewed by Marshall and Laws (5, 6, 14-16). Some of these will be described here:

Covert Sensitization: This is a method that has been used effectively to disrupt fantasies and behaviors that are antecedent to the offending behavior. It pairs urges and feelings that lead an individual to engage in a deviant act with aversive images which reflect the adverse consequences of continuing with the deviant behavior (17, 18). This treatment is conducted by having the patient tape record the session in private. A therapist then reviews it and offers feedback in either individual or group sessions. This technique has been used successfully to treat exhibitionists (19, 20).

Satiation: Masturbatory satiation is a technique that is effective in decreasing deviant sexual arousal by making the deviant fantasy boring. This therapy consists of having the patient masturbate at home in private to non-deviant adult fantasies until ejaculation has occurred. Satiation works pairing deviant sexual fantasies with the aversive task of masturbating for 55 minutes post orgasm. These sessions are audiotaped at home and brought to therapy sessions where tapes are reviewed and critiqued. Several studies have supported the value of this technique (12, 21-23).

Systematic Desensitization: This is a technique that is effective in decreasing deviant sexual arousal by making the deviant fantasy boring. This therapy consists of having the patient masturbate at home in private to non-deviant adult fantasies until ejaculation has occurred. Satiation works pairing deviant sexual fantasies with the aversive task of masturbating for 55 minutes post orgasm. These sessions are audiotaped at home and brought to therapy sessions where tapes are reviewed and critiqued. Several studies have supported the value of this technique (12, 21-23).

Systematic Desensitization: This is a technique that aims at the decrease of maladaptive anxiety by pairing relaxation with imagined scenes depicting anxiety-producing situations (24).
Enhancing Appropriate Sexual Arousal to Adult Partners
The second component of cognitive-behavioral treatment with individuals with paraphilias is to assist the patient with enhancing sexual interest and arousal to adult partners or to appropriate behavior with adult partners. There are a variety of techniques, some of which will be described here.

Orgasmic Reconditioning: Marquis (25) first described this procedure in which the client masturbates to orgasm while fantasizing about or watching normative sexual behavior with adults. Other clinicians later described similar techniques (26). According to Laws and Marshall (12), evidence is weak. Masturbatory satiation, previously described, is also used to replace deviant fantasy by pairing fantasies of consenting sex with peers with masturbation and ejaculation.

Fading: This is a technique which helps individuals shift their sexual fantasies from atypical to acceptable (27). It aims to change sexual fantasy and arousal towards more acceptable interests. The patient is asked to fantasize about atypical sexual stimuli and then gradually fade the fantasy to one involving more acceptable sexual activity.

It is also used to increase sexual interest in adults (27). Kelly (28) reviewed behavioral procedures used to try and reorient sexual preferences of child molesters. He reported that 75% of programs employed behavioral techniques to suppress deviant sexual arousal, others used procedures to enhance appropriate sexual arousal and some used both. He concluded overall that these procedures were effective.

Other Components of Cognitive-Behavioral Treatment
Many early programs added other treatment components in order to help patients initiate and maintain appropriate social, sexual and intimate relationships (29-31). Marshall and Laws (5, 6) have written a comprehensive history of cognitive-behavioral approaches to treatment that describes all the components in detail. The most widely used will be briefly described here.

Cognitive Restructuring: Behavior is influenced by cognitive processes and attitudes. This component of treatment targets cognitive distortions (17, 32, 33). An example of such a distortion is “Having sex with a child is a good way for an adult to teach the child about sex.” Most individuals who engage in atypical sexual behaviors have developed permission-giving statements or rationalizations and hold irrational beliefs regarding their fantasies and behaviors. Many paraphiliacs change their attitudes and beliefs to be consistent with their behaviors. This results in cognitive distortions, misbeliefs, and a rationale to support their behavior. Treatment focuses on recognition of the offender’s own distortion.

Assertive Skills Training: Some paraphiliacs are unable to express positive or negative feelings, state what they want, or ask others to change their behavior. Some are passive or aggressive. Techniques used include: modeling, rehearsal, and social feedback (17).

Social Skills Training/Intimacy Deficits: Some paraphiliacs lack knowledge of what is considered appropriate sexual behavior. Others have sexual problems that are in need of treatment, such as premature ejaculation or erectile dysfunction. A goal of this part of treatment is also to help the individual decide what the components of “healthy sexuality” would be (34).

Empathy: Often sexual offenders have deficits in empathy for their victims and little sensitivity to what their victims have experienced. One component of therapy is enhancement of empathy (35).

Personal Victimization: Research has shown that a large number of offenders have themselves been sexually abused (36) and that left untreated this may put them at greater risk to recidivate. Dealing with their own victimization is an important component of treatment for sex offenders (17, 37).

Relapse Prevention: Relapse prevention was first described by Marlatt (38) in his work with substance abusers. This was then extended to the treatment of sex offenders (39). The goals are to teach individuals how to anticipate and cope with relapse, to help identify high-risk situations and triggers, and to cope by using cognitive interventions and skills training.

Adjunctive Treatment: In response to criticism of the relapse prevention model, Ward and Hudson developed a “self-regulation” model of the offense process (40). This model is based upon setting goals and making decisions by integrating cognition, affect, and behavior (41). This approach is intended to augment and enhance cognitive-behavioral treatment. The Good Lives and Emotion Self-Regulation Models address the promotion of a good life and the management of risk. Treatment takes a positive approach rather than focusing on avoidance goals, and it is a humanistic and positive approach.
Multi-systemic Treatment is another modality which has been used with adolescents with inappropriate sexual behavior (42). Treatment addresses the needs of the family and other influences, such as school environment and peers.

**Efficacy of Treatment**

Evaluation of treatment effectiveness and recidivism has proven extremely difficult because of many factors. Among these are methodological problems, underreporting of sexual crimes, sample variability, differences in treatment interventions, and differences in data analysis. However, there have been several outcome studies of individual programs, as well as meta-analyses. We will focus on individual program outcome studies first.

**Individual Programs**

In 1988 Abel and his colleagues (43) conducted a study of outpatient sex offenders under a certificate of confidentiality and found that many offenders had multiple paraphilias and higher incidences of sexual offenses than had been found in other samples without the confidentiality certificate (44). This group also reported on a follow-up study of 192 sexual offenders treated in a 30-week cognitive-behavioral program (17, 43). At one-year post-treatment, 12% had recidivated (according to self-report). A history of multiple offense types was the largest predictor of relapse.

In 1993 Maletzky reported on a retrospective study over 20 years of 4,381 pedophiles who had been treated in an outpatient program for an average of 23 months (45). Although recidivism was low initially, relapse rates continued to rise even 10 years after treatment. In 2002 Maletzky and Steinhauser reported on an expansion of the original database in a 25-year follow-up study of cognitive-behavioral therapy with 7,275 sexual offenders (46). They concluded that overall “the cognitive-behavioral techniques employed generated long-lasting positive results by reducing recidivism & risk to the community” (p. 143). They reported that outcomes appeared to be better in child molesters and exhibitionists than in homosexual pedophiles and rapists.

Marques et al. in 2005 (47) reported on the results of a relapse prevention program with incarcerated sexual offenders. The study was randomized and compared reoffense rates among three groups: inpatient relapse prevention treatment and two untreated prison control groups. The results were disappointing: No significant differences were found among the three groups for both child molesters and rapists over an 8-year follow-up period. However, of those who received relapse prevention treatment, individuals who met the program’s treatment goals had lower reoffense rates than those who did not.

**Meta-analyses Relevant to Treatment Outcome**

Furby et al. in 1989 (48) reviewed empirical studies of sex offender recidivism. They included 42 studies of treated and untreated sex offenders and cited many problems with methodological variability from study to study. They concluded that “There is as yet no evidence that clinical treatment reduces rates of sex offenses in general and no appropriate data for assessing whether it may be differentially effective for different types of offenders” (p. 27).

Hall (49) in 1995 conducted a meta-analysis of the treatment outcome literature and concluded that cognitive behavioral treatment was effective. Community based treatment showed better effects than institutional based treatment.

A more recent meta-analysis by Hanson and Bussière (5) summarized data from 43 studies (n = 9,454) examining the effectiveness of psychological treatment for sex offenders. The sexual offense recidivism rate was lowest for the treatment groups (12.3%) than the comparison groups (16.8%). Cognitive-behavioral treatment (k = 13) and systemic treatment (k = 2) were associated with reductions in sexual recidivism (from 17.4 to 9.9%). Older forms of treatment appeared to have little effect.

Lösel and Schmucker (4) in 2005 reported a meta-analysis performed on sex offender treatment from 69 studies (total N = 22,181). Treated offenders showed 37% less sexual recidivism than controls. Of the treatments utilized, surgical castration and hormonal medication showed larger effects than psychosocial intervention. However, among the psychosocial interventions, cognitive-behavioral approaches revealed the most robust effect. Non-behavioral treatments did not demonstrate a significant impact.

The Cochrane Review (50) examined all randomized controlled trials for people with disorders of sexual preference and for convicted sex offenders. Using a comprehensive literature search strategy to locate treatment studies, 431 citations were identified; of these only three studies were included in the review. Nine studies were identified as awaiting assessment and the rest excluded for reasons that they were not randomized trials, interventions were not compatible with the review protocol, or the described trials on the same group of patients. One study, by Marques et al. (47, 51) has been mentioned. The other, by McConaghy (52) found that anti-libidinal medication plus imaginal desensitization was no better
than imaginal desensitization alone. A large pragmatic trial that investigated the value of group therapy for sex offenders was included (54); this study found no effect on recidivism at 10 years. The Review concluded (50, p. 2):

It is disappointing to find that this area lacks a strong evidence base, particularly in light of the controversial nature of the treatment and the high levels of interest in the area. The relapse prevention programme did seem to have some effect on violent reoffending but large, well-conducted randomized trials of long duration are essential if the effectiveness or otherwise of these treatments is to be established.

LIMITATIONS
The main limitation of this study is the fact that it is a literature review, which is influenced by the knowledge and biases of the authors. Additionally, treatment of sexual offenders has not had the funding, research base, or development of scientific studies that other areas of psychiatry have enjoyed. Most of the studies upon which the knowledge base of the treatment of sexual offenders is based are seriously flawed. Nevertheless, this article represents a comprehensive review of cognitive-behavioral therapy.

CONCLUSIONS
Cognitive-behavioral therapy has been and continues to remain the predominate approach to the treatment of sex offenders and/or individuals with paraphilias. Its main treatment approach involves decreasing inappropriate sexual arousal through a variety of techniques, including covert sensitization, satiation, fading, and systematic desensitization. This approach also aims to enhance appropriate sexual arousal to adult partners through techniques such as orgasmic reconditioning or fading. Other components of cognitive-behavioral treatment include cognitive restructuring, assertive skills training, social skills training, addressing intimacy deficits, sexual education, sexual dysfunction treatment, enhancing empathy, personal victimization, relapse prevention, and a variety of adjunctive treatments which have been developed through the years. Some individual programs utilizing cognitive-behavioral treatment have reported positive outcomes, but the best-designed study reported no clear benefit. An early influential meta-analysis by Furby (48) reported no discernable effect of treatment, but later meta-analyses reported positive effects of cognitive-behavioral treatment on recidivism. Overall, however, the evidence base for cognitive-behavioral treatment is extremely limited and empirical research focusing on effective treatment for this population is critically needed.

References
8. Pavlov IP. The scientific investigation of the psychical faculties or processes in the higher animals. Science 1906;24:613-619.


