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SEXUAL DISORDERS (JP FEDOROFF, SECTION EDITOR)

Psychological Treatment of Sex Offenders

R. Karl Hanson · Pamela M. Yates

Abstract This article reviews the research evidence, practice guidelines and accreditation standards for the psychological treatment of individuals who commit sexually motivated crimes. Overall, the sexual offender treatment outcome research is not well developed, which limits strong conclusions. There is, however, strong research evidence concerning the effectiveness of interventions for general (non-sexual) offenders. Given the considerable overlap in risk factors for sexual and general offending, the "what works" principles for general offenders provide useful guidelines for sexual offender treatment. Specifically, the intensity of treatment should be proportional to the offender's risk level (risk principle), treatment should focus on characteristics associated with recidivism risk (i.e., criminogenic needs; need principle), and be tailored to the learning style and abilities of clients (responsivity principle). Examples of promising new approaches to sexual offender treatment are provided.

Keywords Sex offenders · Treatment · Recidivism · Risk factors · Accreditation · Criminogenic needs · Psychiatry

Introduction

Sexual offending is a special kind of crime. Whereas most of us can appreciate the goals (if not the means) of bank robbers and thieves, we can be bewildered when individuals take serious risks in order to expose their genitals to strangers or touch the buttocks of a naked boy. Consequently, it should not be surprising that individuals convicted of sexual crimes are frequently referred to mental health services. Sexual crimes are also distinct in that they invoke very high levels of public concern; even a single instance of sexual recidivism can lead to careful scrutiny about the adequacy of case management decisions and to restrictive legislation and policy.

Psychiatrists have an important and distinct role in directing medical interventions for sexual offenders, particularly the use of anti-androgens. It is not unusual, however, for psychiatrists to also conduct evaluations and provide psychotherapy and counseling services to this population. The use of psychological interventions is particularly significant given that only a small proportion of identified sexual offenders are appropriate candidates for hormone deprivation therapy. Even for psychiatrists who restrict their clinical role to medication, knowledge of psychological treatments is important. Practice guidelines for the use of sex-drive-reducing medications stipulate that such medications should only be used for individuals who are simultaneously engaged in comprehensive treatment programs [1, 2].

The purpose of this article is to review the psychological treatments available for sexual offenders, summarize the evidence for their effectiveness, and provide directions on selecting psychological interventions with the most likelihood of success. Whereas the evidence base for sexual offender treatment is not well developed, there is strong evidence concerning the characteristics of effective interventions for general (predominantly non-sexual) offenders [3, 4]; furthermore, there is some evidence that these characteristics also apply to the effective treatment of sexual offenders [5•]. Consequently, we believe that the "what works" principles of offender rehabilitation are a useful guide for structuring psychological interventions for sexual offenders.

Sexual offenders will typically come to the attention of mental health professionals because of criminal justice sanctions. In Westernized democracies, sexual crimes are primarily

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R. K. Hanson (✉)
Corrections Research, Public Safety Canada,
340 Laurier Ave., West,
Ottawa, Ontario K1A 0P8, Canada
e-mail: Karl.Hanson@ps-sp.gc.ca

P. M. Yates
Cabot Consulting and Research Services, P.O. Box 38027,
1430 Prince of Wales Drive,
Ottawa, Ontario K2C 1N0, Canada
e-mail: pmyates@rogers.com

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defined by sexually motivated violations of the rights of others. In particular, sexual crimes are based on a lack of consent (e.g., sexual assault) or the inability to consent (e.g., child molestation). Certain sexual crimes, however, are based on indecency, such as prostitution and consenting sexual activity in public places. This review will focus on the first types of sexual crimes (involving non-consent), such as sexual assault of adults, child molestation, and exhibitionism. The vast majority of these offenders are men (95 %) [6], and given that little is known about treatment for female sexual offenders, this article will only concern the psychological treatment of male sexual offenders.

Individuals convicted of sexual crimes may or may not have a diagnosable mental disorder related to their offending behavior. The most common risk-relevant diagnoses are cluster B personality disorders (narcissistic, borderline, antisocial) and paraphilias, particularly pedophilia. Even for those without formal diagnoses, there is a high likelihood that they have risk-relevant psychological characteristics worthy of intervention. These characteristics could include lifestyle impulsivity, tolerance of rule violations, emotional identification with children, and hostility toward women [7].

From the public's perspective, the goal of sexual offender treatment is to reduce the likelihood of re-offending. Offenders typically share this goal; however, they are also concerned about how it is achieved. Both the individual and society concur on the merits of the reformed offender building a satisfying and productive life as a law-abiding citizen. Given both public safety goals and the importance of non-offending for adequate social adjustment, recidivism is used as the major criterion for evaluating the efficacy of treatment.

The rates of sexual recidivism among individuals convicted of sexual crimes are lower than the public generally believes. Large-scale meta-analyses have identified sexual recidivism rates of between 7 % and 15 % after approximately 5 years [8, 9]. In general, sexual offenders are more likely to reoffend with a non-sexual offence than a sexual offence [8]. Consequently, treatment for sexual offenders should be mindful of the risk of both sexual and non-sexual recidivism.

Sexual offenders vary in the risk they pose to the community. For some, the risk of sexual recidivism is sufficiently low that it is indistinguishable from the risk of sexual crimes among general offenders with no recorded history of sexual crime. For example, the 5-year sexual recidivism rate of low-risk sexual offenders (<2.4 %) [10] is equivalent to the rate at which offenders convicted of other types of offences will commit a sexual offence "out of the blue" (1 % to 3 %) [11–13]. For such low-risk sexual offenders (bottom 15 % of the risk distribution), interventions cannot be expected to further reduce their risk and may even make them worse [14]. Consequently, treatment for low-risk offenders should focus on goals other than sexual recidivism reduction, such as family reintegration, intimacy deficits, or shame. For some cases any specialized sexual offender treatment is contraindicated, and they would be better served by routine criminal justice interventions, such as regular supervision while in the community.

"What Works" in Offender Treatment

During the 1970s and 1980s, there was considerable pessimism concerning the ability of treatment to decrease the recidivism risk of offenders. In response to Martinson's [15] "Nothing Works" doctrine, a group of researchers led by Andrews and colleagues conducted a series of influential studies that identified "what works" in offender rehabilitation [16–18]. Their major conclusion was that programs associated with reductions in reoffending can be identified by the extent to which they adhered to certain basic principles. These principles became known as the risk, need, and responsivity (RNR) principles of effective corrections [3, 19]. The validity of these basic principles has been demonstrated in high-quality random assignment studies [20] and by meta-analyses by independent groups [3, 21–24].

The risk principle states that the intensity of services should be proportional to the offender's risk for recidivism. The most intensive services should be directed to the highest risk offenders. For low-risk offenders, treatment can even be iatrogenic and can increase risk. The need principle states that treatment should be directed toward the offenders' life problems that are related to recidivism risk (criminogenic needs), with only secondary attention to other life problems (non-criminogenic needs). For example, attitudes tolerant of law violation is a criminogenic need, whereas worry and depression are not [25, 26]. Mental health providers have a responsibility to address diverse psychiatric and psychological problems; however, to the extent that treatment aims to reduce recidivism, it is important to focus on characteristics that are empirically associated with the persistence of crime and violence. Finally, the responsivity principle states that treatment should be delivered in a manner that is likely to connect with clients. For offenders, this means cognitive-behavioral interventions tailored to their language, culture, and learning style.

The Effectiveness of Treatment for Sexual Offenders

The research on the effectiveness of treatment for sexual offenders is less well developed than the research on general offenders. Although hundreds of studies have been published on sexual offender treatment, the conclusions remain tentative because few high-quality studies have been conducted. For example, the Swedish Council on Health Technology Assessment [27] identified only eight studies

of treatments for child molesters that met minimal quality standards (based on the GRADE criteria [28]). They concluded that there was insufficient evidence regarding the benefits and risks of psychological treatment of adult perpetrators of child sexual abuse. They did find weak evidence that multisystemic therapy (MST) could be beneficial for adolescent perpetrators [29•].

Nevertheless, most systematic reviews have typically found statistically significant but modest reductions in recidivism rates for treated compared to untreated sexual offenders (see the 2010 analysis of 8 systematic reviews by the Institute of Health Economics; [30]). For example, based on 74 studies, Lösel and Schmucker [31] found an overall odds ratio of 0.59, which translates to sexual recidivism rates of 11.1 % for the treatment groups compared to 17.5 % for the comparison groups. All reviews have identified positive treatment effects for cognitive-behavioral interventions.

Perhaps the most influential of the recent reviews has been that of Hanson et al. [5•]. Based on 23 studies meeting study quality criteria (Collaborative Outcome Data Committee Guidelines [32, 33]), the researchers found that treatment for sexual offenders was most likely to be successful when it followed the same RNR principles shown to be effective for general offenders. The odds ratio for sexual recidivism was 0.21 for programs following all three principles, 0.63 for programs following one or two of the principles, and 1.17 for programs following none of the principles. In other words, RNR-compliant programs cut recidivism rates to less than one-quarter of the rates of the comparison group, whereas the completely non-compliant programs were associated with a (non-significant) increase in sexual recidivism. A similar pattern of effects was observed for violent and general (any) recidivism.

Application of the RNR Model to Sexual Offender Treatment

The RNR model is not a stand-alone treatment program. Much more is required for treatment to be effective (e.g., a sound model of change, adequate funding, community support; [34]). When stated, the RNR principles appear obvious (e.g., treat problems related to criminal behavior); however, it is surprising how rarely programs conform to even these three principles. In Hanson et al.'s [5•] meta-analysis of sexual offender treatment programs, only 3 of 23 programs were found to meet the RNR criteria (13 %). The compliance rate is similar in the general offender literature. In a review of 374 offender treatment outcome evaluations for general offenders, 60 (16 %) met all three principles, and approximately one-third (k=124) met none [21].

The following section provides guidance for sexual offender treatment providers wishing to adhere to the RNR principles. As well, we highlight some new and promising approaches to psychological interventions with sexual offenders.

Risk (Treatment Dosage)

The risk principle states that higher intensity interventions, including treatment, should be used with higher risk offenders, while lower risk offenders should receive minimal or no treatment (e.g., routine supervision in the community). The next obvious question is how much treatment is enough? Unfortunately, there is little available research concerning the necessary dosage for different risk levels. With respect to adult sexual offenders, Marshall, Marshall, Serran, and Fernandez [35] recommended between 80 and 120 contact hours over 4 to 6 months, although this recommendation was based on clinical experience and was not empirically based. In addition, offenders in their particular program tend to be of lower and moderate risk levels.

In practice, the program length for sexual offenders varies considerably across jurisdictions [36], even among the narrow category of accredited sexual offender programs run by national prison services. For example, in the UK, average treatment duration for their accredited program is 80 h, although more intensive treatment is available for offenders with additional treatment needs [37]. In the programs run by the Correctional Service of Canada (CSC), treatment dosage is in the area of 300 contact hours for high-risk offenders and ranges between 160 to 195 contact hours for moderate-risk sexual offenders [38]. As well, offenders in CSC programs may receive additional programs needed to address other criminogenic needs, such as substance abuse or general violence [39].

Among adult general offenders, Bourgon and Armstrong [40] conducted a comprehensive evaluation of treatment dosage as related to level of risk and extent of criminogenic needs. Results indicated that 100 contact hours was sufficient to reduce recidivism for general offenders with moderate risk and few criminogenic needs, but that 200 hours of contact was more effective in reducing recidivism when offenders were either high risk or had multiple criminogenic needs (but not both). Lastly, 300 contact hours or more was required to reduce recidivism among offenders who were both higher risk and who had multiple criminogenic needs.

One meta-analysis of treatment for juvenile (non-sexual) offenders [41] recommended at least 100 contact hours for treatment to be effective. However, it is uncertain whether this can be directly applied to juveniles who have committed sexual offences.

In summary, there is little direct research to guide clinicians in terms of the appropriate duration or dosage of treatment for sexual offenders. We believe, however, that the research on general offenders and the dosage used in the

accredited programs provide useful reference points. Until further research is available, it would be reasonable to plan for 100 to 200 h for moderate risk sexual offenders and for a minimum of 300 h for sexual offenders with high risk and high needs. Low-risk offenders may need no specialized treatment at all. The statements above apply to risk levels defined by percentile ranks, with low risk offenders being in the bottom 10 % to 20 % of the risk distribution and high-risk offenders being in the top 10 % to 20 % [42].

Need (Risk Factors for Sexual Recidivism)

Treatment programs are most likely to reduce recidivism risk when they target characteristics associated with recidivism risk. Characteristics that are both risk-relevant and potentially changeable have been referred to as dynamic risk factors, criminogenic needs [21], or psychologically meaningful risk factors [7]. The major risk factors for sexual recidivism are listed in Table 1. These risk factors were selected because they have been shown to have significant statistical relationships with sexual recidivism when averaged across at least three follow-up studies [Cohen's d>0.10; [7, 8, 43, 44]].

Table 1 Established risk factors for sexual recidivism

Sexual deviance
• Any deviant sexual preference
○ Sexual preference for children
○ Sexualized violence
○ Multiple paraphilias
• Sexual preoccupations
• Attitudes tolerant of sexual assault
Lifestyle instability/criminality
• Childhood behaviour problems (e.g., running away, grade failure)
• Juvenile delinquency
• Any prior offences
• Lifestyle instability (reckless behaviour, employment instability)
• Personality disorder (antisocial, psychopathy)
• Grievance/hostility
Social problems/intimacy deficits
• Single (never married)
• Conflicts with intimate partners
• Hostility toward women
• Emotional congruence with children
• Negative social influences
Response to treatment/supervision
• Treatment drop-out
• Non-compliance with supervision
• Violation of conditional release
Poor cognitive problem-solving
Age (young)

The major risk factors for sexual recidivism can be grouped into the two broad categories of general criminality and sexual criminality. Like other offenders, sexual recidivists commit serious rule violations and share common characteristics such as lifestyle instability, negative peer influences, and conflicts with intimate partners. There are, however, certain risk factors that are unique to sexual offenders, such as deviant sexual interests, sexual preoccupations, and emotional congruence with children. It is also worth noting some characteristics that do not qualify as criminogenic needs, such as internalizing psychological disorders (distress), lack of victim empathy, denial of sexual crime, major mental illness, and low sexual knowledge, as these are unrelated to recidivism [43, 45].

Effective treatment programs do not ignore all non-criminogenic needs. This would be a mistake. Basic standards of care direct mental health professionals to address their patients' suffering—even if it is unrelated to recidivism risk. Furthermore, addressing non-criminogenic needs is often necessary for effective engagement (see section on responsivity below). On balance, however, interventions that reduce criminal behavior focus primarily on criminogenic needs (e.g., low self-control, negative peers, sexual preoccupation).

Responsivity (Matching Treatment to the Client)

Responsivity concerns the interaction between treatment and the client, with the delivery of treatment tailored to specific client characteristics [3]. Responsivity addresses client characteristics such as personality, motivation, culture, language, literacy levels, learning styles, abilities, and disabilities—all of which can influence successful client engagement. Motivation is a particularly salient concern in the treatment of sexual offenders [46]. Similarly, offenders with mental disorders may require adapted programming to address their specific needs, either prior to or in addition to sexual offender-specific treatment.

Although there are many different styles of psychotherapy, the research has consistently supported structured cognitive-behavioral programs for offender populations [3, 31, 47]. Consequently, the core features of cognitive-behavioral treatment should be considered in the development of treatment programs for sexual offenders. These features include a focus on cognitive and behavioral self-regulation, skills building, practice, and rehearsal.

Thus, treatment that effectively addresses responsivity is both cognitive-behavioral in orientation and adapts effectively to the client's personal, interpersonal, and social characteristics.

Promising Programs and Future Directions

Several jurisdictions have formalized the essential elements of effective correctional treatment into accreditation standards

[48–51]. Accreditation criteria aim to ensure that treatment is evidenced-based, compliant with the RNR principles, and implemented with integrity (see Table 2). Although many of the accredited programs are cognitive-behavioral, the range of programs has been diverse. Several of the accredited programs currently operated by national correctional agencies have evolved from the relapse prevention model [52]. Originally developed to maintain treatment gains among individuals with substance abuse problems, relapse prevention was adapted to sexual offender treatment, without demonstrated success [53–55]. In more recent years, the traditional relapse prevention model has shifted toward a broader self-regulation approach [56–58]. In general, the most promising sexual offender treatment programs aim to change cognitive, attitudinal, affective, and behavioral patterns associated with sexual aggression, introduce adaptive patterns, and inculcate the skills necessary to manage the dynamic risk factors associated with recidivism risk [35, 38, 59].

One recent development is the Good Lives Model (GLM) of offender treatment [60, 61]. In a 2009 survey, the GLM was found to be an important influence in approximately 30 % of sexual offender treatment programs [36], whereas it was not even an option on a similar 2002 survey [62]. Although the GLM shares certain features of cognitive-behavioral treatment, its roots are in humanistic and positive psychology. Specifically, the goal of rehabilitation in GLM treatment is to assist offenders to meet their needs and goals in life in a manner that is appropriate and prosocial. Risk factors are considered as obstacles to achieving these goals. According to the model, the attainment of life goals, well-being, and psychological satisfaction will diminish the attraction for offending [61] and increase motivation for treatment [63–65]. As this model is relatively new, research into its effectiveness is in its infancy; however, preliminary research supports the basis of the theoretical model and its positive impact on within-treatment targets, such as increased motivation and engagement with treatment, reduced attrition, and progress on treatment goals [66–68].

Another promising approach is Circles of Support and Accountability (COSA), an intervention designed for community re-integration of high-risk offenders [69]. Unlike other programs, COSA utilizes specially trained community volunteers. These volunteers provide intensive support upon release to the community and assist core members (i.e., the offenders) to implement risk management plans and to develop the basic skills for community reintegration. Several recent evaluations have found lower than expected recidivism rates among COSA core members [24, 70•, 71, 72], although more and better quality research is needed before strong conclusions can be made concerning its efficacy and generalizability.

The Prevention Project Dunkenfeld (PPD), led by Claus Beier at Charité University in Berlin, Germany [73], is another promising development. The goal of this project is to treat individuals with pedophilic and hebephilic sexual interests who are not subject to the controls of the criminal justice system. The actual treatment program is similar to those found in other settings, involving a combination of cognitive-behavioral interventions, elements of the Good Lives Model, and, selectively, androgen-deprivation medications [74, 75]. What is unique is how the offenders are recruited into treatment.

Beginning in 2005, patients were recruited for PPD through mass media campaigns (television and billboards). The specific messages were developed in consultation with patients with pedophilia who were already in treatment. The ads were intended to convey empathy and to minimize discrimination and shame (“Do you like children more than

Table 2 Sexual offender treatment accreditation criteria

Criterion	Definition
Empirically -demonstrated model of change	Programs are based on a comprehensive model of change that is supported by research
Targeting criminogenic needs/dynamic risk factors	Programs target criminogenic needs directly associated with offending, particularly dynamic risk factors with strong links to sexual recidivism.
Use of effective methods	The use of specific methods (e.g., cognitive, behavioural) demonstrated to reduce sexual aggression and that are not general psychotherapy.
Skills orientation	Treatment focuses on development and rehearsal of new skills that alter behaviour and cognition to reduce risk and recidivism.
Treatment intensity	Frequency of contact is tailored to match offenders’ levels of risk and criminogenic needs, with higher levels of intervention reserved for higher risk offenders.
Offender responsivity	Treatment is flexible and responsive to offenders’ personal and social characteristics and is adapted accordingly; treatment maximizses clients’ motivation and engagement.
Continuity of care	Follow-up/maintenance programs and supervision are provided to reinforce skills learned and to ensure continuity in overall management of offenders.
Ongoing program evaluation and monitoring	To ensure programs are implemented as intended and research is conducted to ensure treatment effectiveness.

you/they like?" "You are not guilty because of your sexual desire, but you are responsible for your sexual behavior. There is help! Don't be an offender!").

As of August 2012, 1,740 individuals had made telephone contact, 719 completed a baseline assessment, and 373 were eligible for treatment [75]. Approximately one-half of the Dunkelfeld patients admitted to a prior contact offence against a child, and two-thirds reported use of child pornography [76]. Of those who had committed sexually motivated crimes, 43 % had been detected at some point by the criminal justice system (current involvement was an exclusion criterion; [76]). The absolute number of offenders who have completed treatment is still small (<100), but the project does indicate that it is possible to recruit individuals with pedophilia into treatment without the coercion of the criminal justice system.

Conclusions

Individuals who have committed sexual crimes vary in their risk for recidivism. For some offenders who have been convicted of sexual crimes, their risk of being convicted of a new sexual crime is no different from the risk presented by individuals with no history of sexual crimes. Others present substantial recidivism risk, both in the short- and long-term. In general, the risk for sexual recidivism increases to the extent that individuals have problems with sexual self-regulation (deviant sexual interests, sexual preoccupation) and difficulties conforming to the demands and expectations of society (antisocial orientation). We believe that useful guidance to the development of effective treatment programs for sexual offenders can be found in the accreditation standards developed by national prison services and by the application of the "what works" principles for interventions with general offenders [3].

Further research is needed in which strong research designs are used to evaluate the most promising treatment approaches for sexual offenders. Currently, there is only one strong study examining a currently plausible treatment for adult sexual offenders: Marques and colleagues' evaluation of a relapse prevention program in California [55]. This study found no effects; however, it is difficult to generalize their findings to other settings, as their results could have been influenced by any number of incidental factors (e.g., hospital versus prison setting, therapists' training). Strong evaluations are unpopular with clinical program managers because they require experimenters (not clinicians) to assign offenders to treatment and control conditions. As well, long follow-up periods (typically greater than 5 years) are required to accumulate sufficient statistical power [77]. Nevertheless, research using strong designs is both possible and desirable [78].

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References

Papers of particular interest, published recently, have been highlighted as:
• Of importance

1. Briken P, Kafka MP. Pharmacological treatments for paraphilic patients and sex offenders. Curr Opinions Psychiatry. 2007;20:609–13.
2. Thibaut F, de la Barra F, Gordon H, et al. The World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for the biological treatment of paraphilias. World J Biol Psychiatry. 2010;11:604–55.
3. Andrews DA, Bonta J. The psychology of criminal conduct. 5th ed. New Providence: LexisNexus Matthew Bender; 2010.
4. Smith PP, Gendreau P, Swartz K. Validating the principles of effective intervention: a systematic review of the contributions of meta-analysis in the field of corrections. Vict Offenders. 2009;4:148–69.
5. • Hanson RK, Bourgon G, Helmus L, Hodgson S. The principles of effective correctional treatment also apply to sexual offenders: a meta-analysis. Crim Justice Behav. 2009;36:865–91. *Compliance with the risk-need-responsivity principles predicted the effectiveness of treatment for sexual offenders*.
6. Cortoni F, Hanson RK, Coache M. Les déliquantes sexuelles: prevalence et récidive [Female sexual offenders: Prevalence and recidivism]. Rev Int Criminol Police Tech Sci. 2009;62:319–37.
7. Mann RE, Hanson RK, Thornton D. Assessing risk for sexual recidivism: some proposals on the nature of psychologically meaningful risk factors. Sex Abuse. 2010;22:191–217.
8. Hanson RK, Bussière MT. Predicting relapse: a meta-analysis of sexual offender recidivism studies. J Consult Clin Psychol. 1998;66:348–62.
9. Helmus L, Hanson RK, Thornton D, et al. Absolute recidivism rates predicted by Static-99R and Static-2002R sex offender risk assessment tools vary across samples: a meta-analysis. Crim Justice Behav. 2012;39:1148–71.
10. Hanson RK, Helmus L, Thornton D. Predicting recidivism among sexual offenders: a multi-site study of Static-2002. Law Hum Behav. 2010;34:198–211.
11. Duwe G. Predicting first-time sexual offending among prisoners without a prior sex offense history: the Minnesota Sexual Criminal Offending Risk Estimate (MnSCORE). Crim Justice Behav. 2012;39:1436–56.
12. Langan PA, Schmitt EL, Durose MR. Recidivism of sex offenders released from prison in 1994. Washington: US Department of Justice, Bureau of Justice Statistics; 2003.
13. Sample LL, Bray TM. Are sex offenders dangerous? Criminol Public Policy. 2003;3:59–82.
14. Lovins B, Lowenkamp CT, Latessa EJ. Applying the risk principle to sex offenders: can treatment make some sex offenders worse? Prison J. 2009;89:344–57.
15. Martinson R. What works? – Questions and answers about prison reform. The Public Interest. 1974;35:22–54.
16. Andrews DA, Zinger I, Hoge RD, et al. Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. Criminology. 1990;28:369–404.
17. Andrews DA, Bonta J, Hoge RD. Classification for effective rehabilitation: rediscovering psychology. Crim Justice Behav. 1990;17:19–52.

18. Gendreau P, Ross RR. Effective correctional treatment: Bibliotherapy for cynics. Crime Delinq. 1979;25:463–89.
19. Bonta J, Andrews DA. Risk-need-responsivity model for offender assessment and rehabilitation (Corrections Research User Report No. 2007-06). Ottawa: Public Safety Canada; 2007.
20. Marlowe DB, Festinger DS, Lee PA, et al. Matching judicial supervision to clients' risk status in drug court. Crime Delinq. 2006;52:52–76.
21. Andrews DA, Bonta J. Rehabilitating criminal justice policy and practice. Psychol Publ Policy Law. 2010;16:39–55.
22. French SA, Gendreau P. Reducing prison misconducts: what works! Crim Justice Behav. 2006;33:185–218.
23. Landenberger NA, Lipsey MW. The positive effects of cognitive-behavioral programs for offenders: a meta-analysis of factors associated with effective treatment. J Exp Criminol. 2005;1:451–76.
24. Wilson DB, Bouffard LA, Mackenzie DL. A quantitative review of structured, group-oriented, cognitive-behavioral programs for offenders. Criml Justice Behav. 2005;32:172–204.
25. Gendreau P, Little T, Goggin C. A meta-analysis of the predictors of adult offender recidivism: what works! Criminology. 1996;34:575–607.
26. Hanson RK. The psychological assessment of risk for crime and violence. Can Psychol. 2009;20:172–82.
27. Swedish Council on Health Technology Assessment. Medical and psychological methods for preventing sexual offences against children: a systematic review. (Report No. 207). Stockholm: Author; 2011.
28. GRADE Working Group. Grading quality of evidence and strength of recommendations. BMJ. 2004;328:1490–4.
29. • Borduin CM, Schaeffer CM, Heiblum N. A randomized clinical trial of multi-systemic therapy with juvenile sexual offenders: effects on youth ecology and criminal activity. J Consult Clin Psychol. 2009;77:26–37. *Multi-systemic therapy resulted in significant reductions in sexual and general recidivism for high-risk youth who have been convicted of sexual offences*.
30. Corabian P, Ospina M, Harstall C. Treatment for convicted adult male sex offenders. Edmonton: Institute of Health Economics; 2010.
31. Lösel R, Schmucker M. The effectiveness of treatment for sexual offenders: a comprehensive meta-analysis. J Exp Criminol. 2005;1:117–46.
32. Collaborative Outcome Data Committee. Sexual offender treatment outcome research: CODC Guidelines for evaluation part 1: introduction and overview (Corrections Research User Report No. 2007-02). Ottawa: Public Safety Canada; 2007.
33. Collaborative Outcome Data Committee. The Collaborative Outcome Data Committee's guidelines for the evaluation of sexual offender treatment outcome research part 2: CODC guidelines (Corrections Research User Report No. 2007-03). Ottawa: Public Safety Canada; 2007.
34. Lowenkamp CT, Latessa EJ, Smith PP. Does correctional program quality matter? The impact of adhering to the principles of effective intervention. Criminol Public Policy. 2006;5:575–94.
35. Marshall WL, Marshall LE, Serran G, Fernandez YM. Treating sexual offenders: an integrated approach. New York: Routledge; 2006.
36. McGrath RJ, Cumming GF, Burchard BL, et al. Current practices and emerging trends in sexual abuser management: the Safer Society 2009 North American survey. Brandon: Safer Society; 2009. p. 2010.
37. Beech A, Mann R. Recent developments in the assessment and treatment of sexual offenders. In: McGuire J, editor. Offender rehabilitation and treatment: effective programmes and policies to reduce re-offending. Chichester: Wiley-Blackwell; 2002. p. 259–88.
38. Correctional Service Canada. Correctional programs: correctional program descriptions. 2000. http://www.csc-scc.gc.ca/text/prgrm/cor-pro-2009-eng.shtml. Accessed Oct 2012.
39. Marshall WL, Yates PM. Comment on Mailloux et al.'s (2003) dosage study. Int J Offender Ther Comp Criminol. 2003;49:221–4.
40. Bourgon G, Armstrong B. Transferring the principles of effective treatment into a "real world" prison setting. Crim Justice Behav. 2005;32:3–25.
41. Lipsey MW. Juvenile delinquency treatment: a meta-analytic inquiry into the variability of effects. In: Cook TD, Cooper H, Cordray DS, Hartmann H, Hedges LV, Light RJ, Louis TA, Mosteller F, editors. Meta-analysis for explanation: a casebook. New York: Russell Sage; 1992. p. 83–127.
42. Hanson RK, Lloyd CD, Helmus L, Thornton D. Developing non-arbitrary metrics for risk communication: percentile ranks for the Static-99/R and Static-2002/R sexual offender risk scales. Int J Forensic Mental Health. 2012;11:9–23.
43. Hanson RK, Morton-Bourgon KE. The characteristics of persistent sexual offenders: a meta-analysis of recidivism studies. J Consult Clin Psychol. 2005;73:1154–63.
44. Helmus L, Hanson RK, Babchishin KM, Mann RE. Attitudes supportive of sex offending predict recidivism: a meta-analysis. Trauma Violence Abuse. 2012. doi:10.1177/1524838012462244.
45. Hanson RK, Morton-Bourgon K. Predictors of sexual recidivism: an updated meta-analysis (Corrections Research User Report No. 2004-02). Ottawa: Public Safety and Emergency Preparedness Canada; 2004.
46. Prescott DS. Building motivation for change in sexual offenders. Brandon: Safer Society Press; 2009.
47. Redondo S, Garrido V, Sánchez-Meca J. What works in correctional rehabilitation in Europe: a meta-analytic review. In: Redondo S, Garrido V, Perez J, Barberet R, editors. Berlin Advances in psychology and law: international contributions. Germany: Walter de Gruyter; 1997. p. 499–523.
48. Public Safety Canada. Accreditation standards for correctional programs. http://www.publicsafety.gc.ca/res/cor/sum/cprs200501_1-eng.aspx. Accessed Oct 2012.
49. Hanson RK, Yates PM. In: Eliasson M, editor. Anthology on interventions against violent men. Acta Universitatis Upsaliensis, Uppsalla Women's Studies B: Women in the Humanities: 3. Uppsala: Uppsala Universitet; 2004. p. 151–66.
50. Lipton DS, Thornton D, McGuire J, et al. Program accreditation and correctional treatment. Subst Use Misuse. 2000;35:1705–34.
51. Maguire M, Grubin D, Lösel F, Raynor P. 'What works' and the Correctional Services Accreditation Panel: taking stock from an inside perspective. Criminol Crim Justice. 2010;10:37–58.
52. Pithers WD, Marques JK, Gibat CC, Marlatt GA. Relapse prevention with sexual aggressives: a self-control model of treatment and maintenance of change. In: Greer JG, Irving RS, editors. The sexual aggressor: current perspectives on treatment. New York: Van Nostrand Reinhold; 1983. p. 214–39.
53. Laws DR. The rise and fall of relapse prevention. Aust Psychol. 2003;38:22–30.
54. Laws DR, Hudson SM, Ward T. The original model of relapse prevention with sex offenders: promises unfulfilled. In: Laws DR, Hudson SM, Ward T, editors. Remaking Relapse Prevention with sex offenders: a sourcebook. Newbury Park: Sage; 2000. p. 3–24.
55. Marques JK, Wiederanders M, Day DM, et al. Effects of a relapse prevention program on sexual recidivism: final results from California's Sex Offender Treatment and Evaluation Project (SOTEP). Sex Abuse. 2005;17:79–107.
56. Laws DR, Ward T. When one size doesn't fit all: the reformulation of relapse prevention. In: Marshall WL, Fernandez YM, Marshall LE, Serran GA, editors. Sexual offender treatment: controversial issues. New Jersey: John Wiley & Sons; 2006. p. 241–54.
57. Ward T, Hudson SM. The construction and development of theory in the sexual offending area: a metatheoretical framework. Sex Abuse. 1998;10:47–63.

58. Yates PM, Ward T. Good lives, self-regulation, and risk management: an integrated model of sexual offender assessment and treatment. Sex Abuse Aust N Z: An Interdiscip J. 2008;1:3–20.
59. Yates PM. Treatment of adult sexual offenders: a therapeutic cognitive-behavioural model of intervention. J Child Sex Abus. 2003;12:195–232.
60. Ward T, Stewart CA. The treatment of sex offenders: risk management and good lives. Prof Psychol: Res Pract. 2003;34:353–60.
61. Ward T, Gannon T. Rehabilitation, etiology, and self-regulation: the good lives model of sexual offender treatment. Aggress Violent Behav. 2006;11:77–94.
62. McGrath RJ, Cumming GF, Burchard BL. Current practices and trends in sexual abuser management: the Safer Society 2002 Nationwide survey. Brandon: Safer Society; 2003.
63. Ward T, Melser J, Yates PM. Reconstructing the risk–need–responsivity model: a theoretical elaboration and evaluation. Aggress Violent Behav. 2007;12:208–28.
64. Yates PM. Using the good lives model to motivate sexual offenders to participate in treatment. In: Prescott DS, editor. Building motivation to change in sexual offenders. Brandon: Safer Society Press; 2009.
65. Yates PM, Prescott DS, Ward T. Applying the good lives and self-regulation models to sex offender treatment: a practical guide for clinicians. Brandon: Safer Society Press; 2010. http://www.safersociety.org/safer-society-press/.
66. Simons D, McCullar B, Tyler C. Evaluation of the good lives model approach to treatment planning. Presented at the XXV Annual Association for the Treatment of Sexual Abusers Research and Treatment Conference. Chicago, Illinois; September, 2006.
67. Simons D, McCullar B, Tyler C. Evaluation of the good lives model approach to treatment planning. Presented at the XXVII Annual Association for the Treatment of Sexual Abusers Research and Treatment Conference. Atlanta, Georgia; October, 2008.
68. Yates PM, Simons DA, Kingston DA, Tyler C. The good lives model of rehabilitation applied to treatment: assessment and relationship to treatment progress and compliance. Presented at the XXVIII Annual Convention of the Association for the Treatment of Sexual Abusers (ATSA). Dallas, Texas; October 2, 2009.
69. Wilson RJ, Picheca JE, Prinzo M. Circles of Support and Accountability: an evaluation of the pilot project in south-central Ontario. Ottawa: Research Branch, Correctional Service of Canada; 2005.
70. • Duwe G. Can Circles of Support and Accountability (COSA) work in the United States? Preliminary results from a randomized experiment in Minnesota. Sex Abuse. 2012. doi:10.1177/1079063212453942. *Significant reductions in general recidivism for sexual offenders who receive structured community support.*
71. Elliott IA, Beech AR. Cost-benefit analysis of Circles of Support and Accountability interventions. Sex Abuse. 2012. doi:10.1177/1079063212443385.
72. Wilson RJ, Cortoni F, McWhinnie AJ. Circles of Support & Accountability: a Canadian national replication of outcome findings. Sex Abuse. 2009;21:412–30.
73. Beier KM, Alhers CJ, Goecker D, et al. Can pedophiles be reached for primary prevention of child sexual abuse? First results of the Berlin Prevention Project Dunkelfeld (PPD). J Forensic Psychiatry Psychol. 2009;20:851–67.
74. Amelung T, Kuhle LF, Konrad A, et al. Androgen deprivation therapy of self-identifying, help-seeking pedophiles in the Dunkelfeld. Int J Law Psychiatry. 2012;35:176–84.
75. Beier KM. The German Dunkelfeld Project: Proactive strategies to prevent child sexual abuse and the use of child abusive images. Presented at the XXXI Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers. Denver, Colorado; October 19, 2012.
76. Neutze J, Michael MC, Schaefer GA, et al. Predictors of child pornography offenses and child sexual abuse in a community sample of pedophiles and hebephiles. Sex Abuse. 2011;23:212–42.
77. Barbaree H. Evaluating treatment efficacy with sexual offenders: the insensitivity of recidivism studies to treatment effects. Sex Abuse. 1997;9:111–28.
78. Association for the Treatment of Sexual Abusers. Statement Supporting the Use of Randomized Control Trials for the Evaluation of Sexual Offender Treatment. 2010. http://www.atsa.com/statement-supporting-use-randomized-control-trials-evaluation-sexual-offender-treatment. Accessed Dec 2012.