U.S. Department of Justice
Office of Justice Programs
Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking

SOMAPI RESEARCH BRIEF

SEX OFFENDER MANAGEMENT ASSESSMENT AND PLANNING INITIATIVE

Luis C.deBaca, Director • July 2015

The Effectiveness of Treatment for Adult Sexual Offenders

by Roger Przybylski

Introduction

Therapeutic interventions aimed at reducing the likelihood of reoffending are a staple of contemporary sex offender management practice. Although there is strong scientific evidence that therapeutic interventions work for criminal offenders overall, the effectiveness of treatment for sex offenders has been subject to debate.

This brief addresses the effectiveness of treatment for adult sexual offenders. Based on a review of the scientific literature, it summarizes what is scientifically known about the topic and identifies policy implications and knowledge gaps that have emerged from the extant research.

Summary of Research Findings

The effectiveness of treatment for sex offenders has been assessed in both individual studies and synthesis research. There is general agreement in the research community that, among individual studies, well-designed and executed randomized controlled trials (RCTs) provide the most trustworthy evidence about an intervention's effectiveness.[1] Findings from a single study, however, must be replicated before definitive conclusions about the effectiveness of an intervention can be made.[2] Synthesis studies, such as a systematic review[3] or meta-analysis,[4] examine the findings from many individual studies and are undertaken to reach conclusions about an intervention's effectiveness based on an entire body of relevant research. When systematic reviews and meta-analyses are done well, they arguably provide

SMART
Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking

About SOMAPI

In 2011, the SMART Office began work on the Sex Offender Management Assessment and Planning Initiative (SOMAPI), a project designed to assess the state of research and practice in sex offender management. As part of the effort, the SMART Office contracted with the National Criminal Justice Association (NCJA) and a team of subject-matter experts to review the literature on sexual offending and sex offender management and develop summaries of the research for dissemination to the field. These summaries are available online at http://smart.gov/SOMAPI/index.html.

A national inventory of sex offender management professionals also was conducted in 2011 to gain insight about promising practices and pressing needs in the field. Finally, a Discussion Forum involving national experts was held in 2012 for the purpose of reviewing the research summaries and inventory results and refining what is currently known about sex offender management.

Based on the work carried out under SOMAPI, the SMART Office has published a series of Research Briefs, each focusing on a topic covered in the sexual offending and sex offender management literature review. Each brief is designed to get key findings from the literature review into the hands of policymakers and practitioners. Overall, the briefs are intended to advance the ongoing dialogue related to effective interventions for sexual offenders and provide policymakers and practitioners with trustworthy, up-to-date information they can use to identify what works to combat sexual offending and prevent sexual victimization.

the most trustworthy evidence about an intervention's effectiveness.

Findings From Individual Studies

One of the few studies to use an RCT design to evaluate the effectiveness of treatment for adult sex offenders was conducted by Marques and colleagues (2005). Widely known as the California Sex Offender Treatment and Evaluation Project (SOTEP), the study examined the effects of a cognitive-behavioral/relapse prevention program on the recidivism of sex offenders who were serving prison sentences for child molestation or rape. Based on a mean follow-up period of approximately 8 years, the study found no significant differences in sexual or violent recidivism between treated sex offenders and two untreated control groups.

Due to its use of random assignment, the SOTEP study is frequently cited as evidence that treatment for sex offenders is ineffective. However, Marques and her colleagues (2005) have pointed out that the study's treatment and control groups likely differed in important ways, and the treatment program itself did not fully adhere to the risk-need-responsivity (RNR) principles of effective intervention. Moreover, some of the treatment subgroups—such as high-risk offenders who "got it," meaning that they derived benefit from the program or basically met specified treatment goals—recidivated at a significantly lower rate than offenders who "did not get it."

Given the findings from the SOTEP study, it is important to recognize that treatment effectiveness can be dependent on a variety of factors, including the treatment climate, program delivery, and how the participant responds to treatment (Friendship, Mann, and Beech, 2003, p. 4). In their study of community-based treatment, for example, Beech and colleagues (2001) found that offenders who were responsive to treatment (based on change in pro-offending attitudes) were less likely to sexually recidivate than offenders who were not.

Several recent studies conducted in prison-based settings also suggest that treatment works.[5] For example—

- A study of a program in a Canadian prison that employed a cognitive-behavioral approach and subscribed to the RNR principles of effective intervention found that treatment produced significant reductions in sexual recidivism (Oliver, Wong, and Nicholaichuk, 2008). Treated sex offenders in the study had sexual reconviction rates of 16.9 percent after 5 years and 21.8 percent after 10 years, compared to sexual reconviction rates for the untreated sex offenders of 24.5 percent after 5 years and 32.3 percent after 10 years of followup.
- A study of a prison-based therapeutic community treatment program in Colorado found that participation in treatment was significantly related to success on parole (Lowden et al., 2003). Sex offenders who completed treatment and participated in aftercare had revocation rates three times lower than untreated sex offenders. Each additional month spent in treatment increased the likelihood of success upon release by 1 percent (12 percent per year).
- In Minnesota, Duwe & Goldman (2009) found that participating in treatment significantly reduced the likelihood and pace of recidivism. For offenders who completed treatment, the observed sexual, violent, and general rearrest recidivism rates were 13.4 percent, 29 percent, and 55.4 percent, respectively. By comparison, the observed sexual, violent, and general rearrest rates for sex offenders who did not participate in treatment were 19.5 percent, 34.1 percent, and 58.1 percent. This study is important because it used propensity score matching (PSM) to create the study's comparison group. PSM is a sophisticated statistical technique for achieving greater equivalence between the treatment and comparison offenders.

Findings From Synthesis Research

Although early reviews of sex offender treatment outcome research produced inconclusive results,[6] synthesis research conducted more recently has produced more positive, albeit qualified findings.[7] In a meta-analysis of 43 studies of psychological treatment for sex offenders, for example, Hanson and colleagues (2002) found that treatment produced a small but statistically significant reduction in both sexual and overall recidivism.[8] The researchers also reported that newer treatment programs were found to have a positive treatment effect, whereas older treatment programs were associated with a small but nonsignificant increase in sexual recidivism.

Although the Hanson et al. (2002) meta-analysis was criticized by Rice and Harris (2003) for relying on poor-quality studies, three important meta-analyses that

incorporated methodological quality considerations have been carried out in recent years, and each found evidence of a positive treatment effect.

Lösel and Schmucker (2005) conducted one of the largest meta-analyses assessing the effectiveness of sex offender treatment ever undertaken. Altogether, 69 studies and a combined total of 22,181 subjects were included in the analysis. The researchers found an average sexual recidivism rate of 11.1 percent for treated sex offenders and 17.5 percent for untreated sex offenders, based on an average followup period of slightly more than 5 years.[9] The average recidivism rates for violent crime and any crime were 6.6 percent and 22.4 percent for treated sex offenders, compared to 11.8 percent and 32.5 percent for untreated sex offenders, respectively. Lösel and Schmucker also found that, among psychological treatments, cognitive-behavioral treatments and behavior therapy had significant treatment effects. Treatment effects also were greater for sex offenders who completed treatment, as dropping out of treatment doubled the odds of recidivating.

Two other important meta-analyses that were based on high-quality studies were conducted by MacKenzie (2006) and Hanson and colleagues (2009). MacKenzie's analysis found that treated sex offenders had a significantly lower rate of recidivism than untreated sex offenders: 12 percent compared to 22 percent.[10] In one analysis based on only the highest quality studies, MacKenzie found that cognitive-behavioral/relapse prevention treatment, behavioral treatment, and hormonal medication significantly reduced sexual recidivism. Hanson and his colleagues (2009) also found that treatment worked. Treated sex offenders had average sexual and overall recidivism rates of 10.9 percent and 31.8 percent, based on an average follow-up period of 4.7 years, compared to 19.2 percent and 48.3 percent for the untreated offenders.[11] The researchers also found that adhering to the RNR principles of effective intervention increased treatment effectiveness. Although treatment that adhered to one or two of the principles was more effective than treatment that did not adhere to any of the principles, treatment that adhered to all three principles was most effective. These findings are supported in a study of the risk principle by Lovins, Lowekamp, and Latessa (2009), which found that high-risk sex offenders who completed intensive residential treatment were more than two times less likely to recidivate than high-risk sex offenders who were not provided intensive treatment. Conversely, low-risk sex offenders who were given intensive treatment were 21 percent *more* likely to recidivate than low-risk sex offenders who were not given intensive treatment.

In addition, a systematic review conducted by Luong and Wormith (2006) found that sex offenders who received treatment recidivated at a significantly lower rate than sex offenders who did not receive treatment. Again, cognitive-behavioral approaches were associated with significant reductions in both sexual and general recidivism. Prentky, Schwartz and Burns-Smith (2006) conducted a narrative review of treatment effectiveness studies and concluded that "the most reasonable estimate at this point is that treatment can reduce sexual recidivism *over a 5- year period by 5–8%*" (p. 5).

Finally, there is evidence suggesting that the use of the Good Lives Model (GLM) in sex offender treatment has become more prevalent in recent years. Rather than focusing solely on risk avoidance and management, the GLM attempts to equip sex offenders with the skills, attitudes, and resources needed to lead a prosocial, fulfilling life, thereby reducing the likelihood of reoffending. Although there is growing interest in the GLM approach, studies that have been undertaken to date have focused on validating the model for sex offenders or discovering within-treatment change,[12] but little is currently known about the efficacy of GLM for reducing the recidivism of sex offenders.

Limitations and Research Needs

Even though the knowledge base regarding treatment effectiveness has greatly improved, more high-quality studies—both well-designed and executed RCTs, and highly rigorous quasi-experiments that employ equivalent treatment and comparison groups on treatment effectiveness—are needed. Propensity score matching and other advanced techniques for controlling bias and achieving equivalence between treatment and comparison subjects can help enhance the credibility of evidence produced by studies that do not employ random assignment. Systematic reviews and meta-analyses that are based on prudent exclusionary criteria and that employ the most rigorous analytical methods available are also needed. Future research should also attempt to build a stronger evidence base on the differential impact of treatment on different types of sex

offenders. Specifying what types of treatment work, for which type of offenders, in which situations, is a key research priority.

Subgroup analyses are particularly important because the positive effects of treatment for a particular subgroup of offenders can be masked in a finding that treatment failed to have a positive impact for the overall treatment sample. Researchers must be diligent, however, not to selectively emphasize treatment benefits for a subgroup of study subjects while ignoring findings for the larger treatment sample (Sherman, 2003; p. 13). New treatment models, such as the GLM, also need to be rigorously evaluated to assess their effectiveness at reducing recidivism.

Summary and Conclusions

This review examined the evidence on treatment effectiveness from both individual studies and synthesis research. Although there is agreement among researchers that the knowledge base is far from complete, the evidence suggests that that treatment for sex offenders—particularly cognitive-behavioral/relapse prevention approaches—can produce reductions in both sexual and nonsexual recidivism. Treatment, however, does not affect all sex offenders in the same way. Treatment may have a differential impact, depending on the characteristics of the treatment participant and other contextual factors. Hence, rather than following a one-size-fits-all approach, treatment is apt to be most effective when it is tailored to the risks, needs, and offense dynamics of individual sex offenders. There is also evidence that the RNR principles are important for sex offender treatment. Hanson et al. (2009) found that treatment that adhered to the RNR principles of effective intervention showed the largest reductions in recidivism. In discussing their findings, Hanson and colleagues stated that "we believe that the research evidence supporting the RNR principles is sufficient so that they should be a primary consideration in the design and implementation of intervention programs for sex offenders" (p. 25).

Notes

1. See, for example, Sherman et al. (1998), MacKenzie (2006), and Farrington and Welsh (2007).

2. See, for example, Lipsey (2002), Petrosino and Lavenberg (2007), and Beech et al. (2001).

3. Narrative reviews were the most common form of synthesis research in the past, but today researchers primarily rely on a more objective and quantitative process called a systematic review. Unlike a narrative review, a systematic review adheres to a pre-established protocol to locate, appraise, and synthesize information from all relevant scientific studies on a particular topic (Petrosino & Lavenberg, 2007). For an example of a systematic review, see Lösel and Schmucker (2005) or MacKenzie (2006).

4. Systematic reviews are increasingly incorporating a statistical procedure called meta-analysis, which helps to reduce bias and the potential for erroneous conclusions. In practice, meta-analysis combines the results of many evaluations into one large study with many subjects, thereby counteracting a common methodological problem in evaluation research: small sample sizes.

5. In addition to Oliver, Wong, and Nicholaichuk (2008), see McGrath et al. (2003) and Zgoba and Simon (2005).

6. See, for example, Furby, Weinrott, and Blackshaw (1989) and the General Accounting Office (1996).

7. One exception to the pattern of recent positive review findings comes from a systematic review focused on psychological interventions for sex offenders, conducted by Kenworthy and colleagues (2004). Nine studies, all RCTs, were included in the analysis and the researchers concluded that, due to limited data, the effects of treatment are unclear.

8. Average followup periods ranged from 1 to 16 years, with a median of 46 months.

9. These recidivism rates are based on the sample size-weighted average for treated and comparison groups. The unweighted average recidivism rates were 12 percent for the treated groups and 24 percent for comparison groups. The average followup period for treated sex offenders was 63.54 months (5.3 years), and the average followup period for untreated offenders was 62.41 months (5.2 years).

10. MacKenzie also examined how various substantive and methodological characteristics of the studies affected treatment outcomes. In one analysis, the effects of various treatment types were examined

using only studies having high-quality methodology. Based only on these high-quality studies, MacKenzie found that cognitive-behavioral/relapse prevention treatment, behavioral treatment, and hormonal medication significantly reduced sexual recidivism. For sex offenders receiving cognitive-behavioral/relapse prevention treatment, the average recidivism rate was 9 percent, compared with an average recidivism rate of 21 percent for untreated sex offenders.

11. Average followup periods ranged from 1 to 21 years, with a median of 4.7 years.

12. See Yates and Kingston (2006), Yates et al. (2009), and Kingston, Yates, and Firestone (2011).

References

Beech, A.R., Erikson, M., Friendship, C., & Ditchfield, J. (2001). *A Six-Year Follow-Up of Men Going Through Representative Probation-Based Sex Offender Treatment Programmes.* Findings, 114. London, England: Home Office.

Duwe, G., & Goldman, R. (2009). The impact of prison-based treatment on sex offender recidivism: Evidence from Minnesota. *Sexual Abuse: A Journal of Research and Treatment,* 21, 279–307.

Farrington, D.P., & Welsh, B.C. (2007). *Saving Children from a Life of Crime, Early Risk Factors and Effective Interventions.* New York: Oxford University Press.

Friendship, C., Mann, R.E., & Beech, A.R. (2003). *The Prison-Based Sex Offender Treatment Programme—An Evaluation.* London, England: Home Office.

Furby, L., Weinrott, M.R, & Blackshaw, L. (1989). Sex-offender recidivism: A review. *Psychological Bulletin,* 105, 3–30.

General Accounting Office. (1996). *Sex Offender Treatment: Research Results Inconclusive About What Works to Reduce Recidivism.* GAO 96-137. Washington, DC: General Accounting Office.

Hanson, R.K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). *A Meta-Analysis of the Effectiveness of Treatment for Sex Offenders: Risk, Need, and Responsivity.* Ottawa, Ontario, Canada: Public Safety Canada.

Hanson, R.K., Gordon, A., Harris, A.J.R., Mareques, J.K., Murphy, W., Quinsey, V.L., & Seto, M.C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse: A Journal of Research and Treatment,* 14(2), 169–194.

Kenworthy, T., Adams, C.E., Bilby, C., Brooks-Gordon, B., & Fenton, M. (2004). Psychological interventions for those who have sexually offended or are at risk of offending. *Cochrane Database of Systematic Reviews* 2004, 3, CD004858.

Kingston, D.A., Yates, P.M., & Firestone, P. (2011). The self-regulation model of sexual offending: Relationship to risk and need. *Law and Human Behavior,* 36(3), 215–224.

Lipsey, M.W. (2002). Meta-analysis and program evaluation. *Socialvetenskaplig Tidskirft,* 9, 194–208 (translated).

Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sex offenders: A comprehensive meta-analysis. *Journal of Experimental Criminology,* 1, 117–146.

Lovins, B., Lowenkamp, C.T., & Latessa, E.J. (2009). Applying the risk principle to sex offenders: Can treatment make some sex offenders worse? *The Prison Journal,* 89, 344–357.

Lowden, K., Hetz, N., Patrick, D., Pasini-Hill, D., Harrison, L., & English, K. (2003). *Evaluation of Colorado's Prison Therapeutic Community for Sex Offenders: A Report of Findings.* Denver, CO: Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Luong, D., & Wormith, S.J. (2006). *The Effectiveness of Psychological Sex Offender Treatment: A Meta-Analysis.* Department of Psychology, University of Saskatchewan, Saskatoon, Canada. Available from the authors at Duyen.Luong@usask.ca.

MacKenzie, D.L. (2006). *What Works in Corrections: Reducing the Criminal Activities of Offenders and Delinquents.* New York, NY: Cambridge University Press.

Marques, J.K., Wiederanders, M., Day, D.M., Nelson, C., & van Ommeren, A. (2005). Effects of a relapse prevention program on sexual recidivism: Final results from California's Sex Offender Treatment and Evaluation Program (SOTEP). *Sexual Abuse: A Journal of Research and Treatment,* 17, 79–107.

Oliver, M., Wong, S., & Nicholaichuk, T.P. (2008). Outcome evaluation of a high-intensity inpatient sex offender treatment program. *Journal of Interpersonal Violence,* 24, 522–536.

Petrosino, A., & Lavenberg, J. (2007). Systematic reviews and metal-analytic best evidence on "what works" for criminal justice decisionmakers. *Western Criminology Review,* 8, 1–15.

Prentky, R., Schwartz, B., & Burns-Smith, G. (2006). *Treatment of Adult Sex Offenders.* Harrisburg, PA: VAWnet, National Online Resource Center on Violence Against Women/Pennsylvania Coalition Against Domestic Violence.

Rice, M.E., & Harris, G.T. (2003). The size and signs of treatment effects in sex offender therapy. In R.A. Prentky, E.S. Janus & M.C. Seto (eds.), *Annals of the New York Academy of Sciences* (pp. 428-440). New York, NY: New York Academy of Sciences.

Sherman, L. W. (2003). Misleading evidence and evidence-led policy: Making social science more experimental. *Annals of the American Academy of Political and Social Science,* 589, 6–19.

Sherman, L.W., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P., & Bushway, S. (1998). *Preventing Crime: What Works, What Doesn't, What's Promising.* Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

Yates, P.M., & Kingston, D.A. (2006). The self-regulation model of sexual offending: The relationship between offence pathways and static and dynamic sexual offence risk. *Sexual Abuse: A Journal of Research and Treatment,* 18, 259–270.

Yates, P.M., Simons, D., Kingston, D.A., & Tyler, C. (2009). The Good Lives model of rehabilitation applied to treatment: Assessment and relationship to treatment progress and compliance. Paper presented at the 28th Annual Research and Treatment Conference for the Association for the Treatment of Sexual Abusers, Dallas, TX.

Zgoba, K. M., & Simon, L. M. J. (2005). Recidivism rates of sex offenders up to 7 years later: Does treatment matter? *Criminal Justice Review,* 30, 155–173.

This research brief was produced by the National Criminal Justice Association under grant number 2010-DB-BX-K086, awarded by the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART), Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this research brief are those of the author(s) and contributors and do not necessarily represent the official position or policies of the SMART Office or the U.S. Department of Justice.

ABOUT SMART

The Adam Walsh Child Protection and Safety Act of 2006 authorized the establishment of the Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART) Office within OJP. SMART is responsible for assisting with implementation of the Sex Offender Registration and Notification Act (SORNA), and also for providing assistance to criminal justice professionals across the entire spectrum of sex offender management activities needed to ensure public safety.