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## **The Effectiveness of Treatment for Adult Sex Offenders**

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*Please Note: What follows is a review of data surveys I conducted through 2007 and then updated in 2011. The text of this review was last updated in 2012. Relevant studies published since 2011 are not included and so the review is not current. Also, as noted below, I cannot say with certainty that all relevant studies published prior to 2011 were included in the survey.*

### ***Introduction***

Treatment and supervision programs which effectively decrease the recidivism rates of sex offenders can be of benefit to both the community and the offender. Evaluating the effectiveness of treatment programs for adult sex offenders, however, is a difficult task. Designing research studies with adequate control groups is challenging and executing them is even more so. The fact that sex crimes are under-reported lowers the (apparent) base rate of sex offending and limits conclusions that can be drawn about the significance of treatment effects. In addition, individual research studies require years to complete and so data about treatment effectiveness are very slow in coming. Meta-analyses of studies already completed are complicated by difficult decisions that must be made about what studies to include and how to compare treatment effectiveness among the disparate individual studies.

Because of these difficulties, conclusions about the effectiveness of treatment for adult sex offenders are difficult to reach. Yet it is important to know what the research tells us.

I examined 44 research studies concerning treatment outcome (35 individual studies and 9 meta-analyses) published since 1984. The studies are generally accessible in peer-reviewed journals or government websites. I relied on the authors' conclusions about whether a finding was significant. I also reviewed critiques of some of the research studies which were published by various authors. I have attempted to categorize study results according to whether programs were effective or not based on the reported findings and, in some cases, critiques of the studies by others. It is possible I have misinterpreted findings or conclusions as represented by the authors but I have attempted to reproduce them accurately. My survey is not intended to be a review of all articles ever

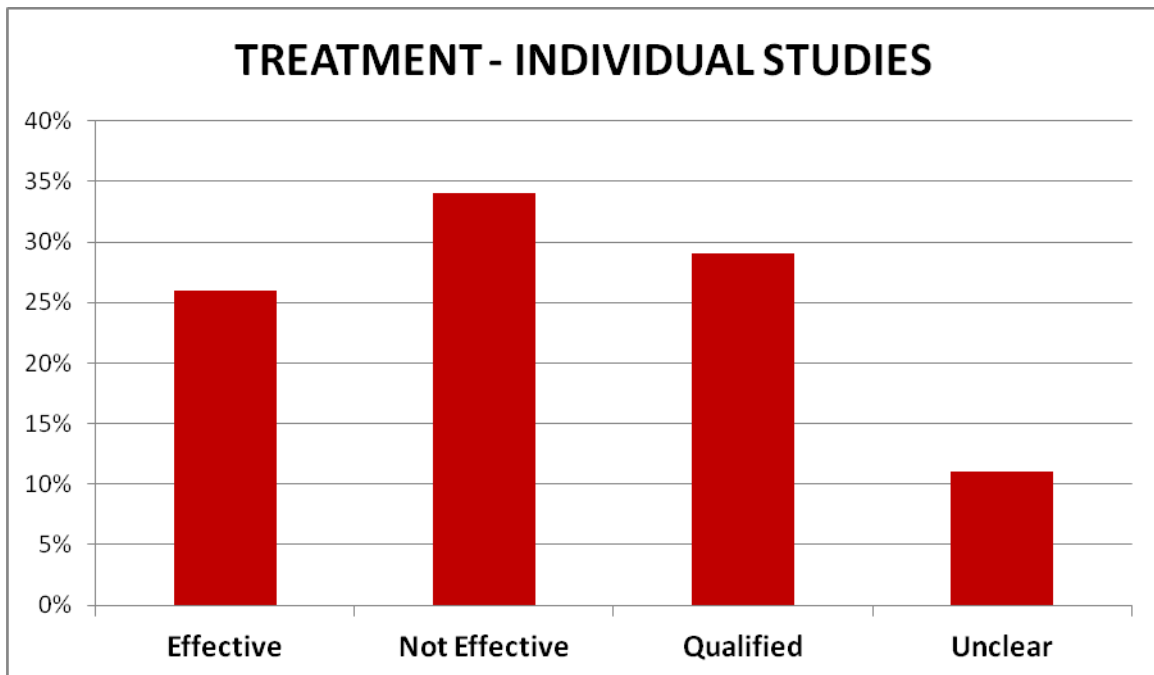
written about the effectiveness of treatment for adult sex offenders; I have, no doubt, missed some but I have included all I could locate with reasonable effort and excluded none I found (other than a very few which clearly lacked appropriate comparisons). It is important to note that this survey is not, in and of itself, a research study or formal meta-analysis and it has not been subjected to peer review; it is simply my attempt to survey the literature as best as I could. I have attempted to provide few interpretive statements so that readers can draw their own conclusions; those that are offered reflect only my opinion.

The form of treatment most commonly offered sex offenders in the studies I surveyed is cognitive/behavioral or relapse prevention therapy (although other forms of treatment were sometimes the focus of the studies). The duration of treatment provided to offenders in the studies surveyed varies from just a few weeks to 4 years although 1-2 years was most common. The amount of time an offender was at risk following treatment ranged from 2 years to 28 years. (In some studies, the duration of treatment and amount of time at risk were difficult to determine.)

***Findings – Individual Studies***

Roughly a fourth of the individual studies surveyed demonstrated that treatment can be effective in reducing recidivism, about a third indicated that treatment had no statistically significant effect in reducing recidivism, and a little less than half provided qualified or unclear results.

Table 1 summarizes the findings of the individual studies surveyed.



**Table 1**

Of the 35 individual studies surveyed, 9 (26%) found that some form of treatment significantly reduces recidivism (*Aytes, Olsen, Zakrajsek, Murray, and Ireson, 2001; Duwe and Goldman, 2009; Looman, Abracen, and Nicholaichuk, 2000; Maletzky, Tolan, and McFarland, 2006; Marshall and Barbaree, 1988; McGrath, Cumming, Livingston, and Hoke, 2003; McGrath, Hoke and Vojtisek, 1998; Nicholaichuk, Gordon, Gu, and Wong, 2000; West, Hromas, Wengler, and Suthers, 2000 - data from "Alaska"*).

12 of the 35 studies (34%) found that treatment did not statistically reduce recidivism (*Barnoski, 2006; Davidson, 1984; Friendship, Mann, and Beech, 2003; Hanson, Broom, and Stephenson, 2004; Hanson, Steffy, and Gauthier, 1993; Harris, Rice, Quinsey, Lalumiere, Boer and Lang, 2003; Marques, Wiederanders, Day, Nelson, and van Ommeren, 2005; Procter, 1996; Quinsey, Khanna, and Malcolm, 1998; Rice, Quinsey, and Harris, 1991; Ruddijs and Timmerman, 2000; Schweitzer and Dwyer, 2003*).

10 of the 35 studies (29%) provided qualified or partial evidence that treatment reduces recidivism. Of these, one study found that treatment reduced recidivism only for those with 2 or more prior convictions (*Taylor, 2000*). Another found that one treatment protocol was effective in reducing recidivism but a second was not (*Marshall, Eccles and Barbaree, 1991*). One study found that treatment reduced violent recidivism but not sex offense recidivism specifically (*Lowden, Hetz, Harrison, Patrick, English, and Pasini-Hill, 2003*). Another (*Colorado Department of Public Safety, Division of Criminal Justice, 2004*) showed that high risk offenders living in settings which provide increased supervision had significantly fewer violations of probation than offenders with other living arrangements although sex offense recidivism was not studied specifically. In a similar study, offenders provided with increased support following their release into the community recidivated less than those not receiving the support although no direct comparisons were made among treated and untreated offenders (*Wilson, Picbea and Prinzo, 2005*). Another study found that treatment had no effect on recidivism compared to a control group but the authors stated that treatment for high risk offenders appeared to lower recidivism when compared to expected recidivism rates (*Abracen, Looman, Ferguson, Leigh, and Mailloux, 2011*). One study found that rapists completing a treatment program recidivated less frequently than those who didn't although a no-treatment control group was not included in the comparison (*Hildebrand, deRuiter, and deVogel, 2004*). Another study found that cognitive skills training reduced overall recidivism for clients meeting certain admission criteria but not sex offense recidivism specifically (*Robinson, 1995*). Two studies found that changes in dynamic risk factors during treatment (and presumed to be the result of treatment) were correlated with reductions in recidivism although, in one, treatment was not found to statistically reduce recidivism (*Olver and Wong, 2009*) and in the other no treatment vs. no-treatment comparison was provided (*Olver, Wong, Nicholaichuk and Gordon, 2007*). I have categorized all ten of these studies as "Qualified".

Four studies (11%) report positive findings but offer little or no statistical analyses to support the findings. Three of these studies found lower sex offense recidivism rates for treated offenders than for non-treated offenders (*West, et al., 2000 - data from "Kentucky", "New Hampshire", and "Vermont"*). The fourth found that recidivism was lower in two of three "containment" probation units than in "non-containment" units (*Boone, O'Boyle, Stone, and Schnabel, 2006*). I have categorized these four studies as "Unclear".

### *Comments and Critiques – Individual Studies*

Three of the studies cited above may be particularly notable because they are relatively recent, large-scale, and well-designed. The findings of what many regard as the best designed study of the efficacy of sex offender treatment, the Sex Offender Treatment and Evaluation Project in California, revealed no statistically significant differences in recidivism between offenders who were treated for 1-2 years and then released from treatment (with one year of parole supervision following treatment) and untreated sex offenders (Marques, et al., 2005). It should be noted that some have commented that the lack of a positive treatment effect might have been due, at least in part, to including treatment drop-outs and non-cooperative clients in the treatment group. On the other hand, it could also be argued that the treatment program ultimately failed with those who dropped out or were non-cooperative after having entered treatment.

A recent large scale study conducted by the Washington Institute for Public Policy (Barnoski, 2006) revealed that there was no reduction in sex offense recidivism for participants in the Washington Department of Corrections treatment program compared to those who did not participate in the program. Interestingly, this study does not seem to appear in a meta-analysis also published by the Washington Institute for Public Policy the same year (findings of the meta-analysis were mixed; see below).

On the other hand, another recent and well designed study conducted in Minnesota (Duvve and Goldman, 2009) found that treatment produced “a significant albeit relatively modest reduction in sex offender recidivism”.

It should also be noted that the conclusions of some of the individual studies suggesting a positive treatment effect are qualified by (sometimes unavoidable) design flaws (even though I have included these studies in the “Effective” category). For example, two studies (Looman, et al., 2000; Nicholaichuk, et al., 2000) were criticized for having inadequate control groups (Hanson and Nicholaichuk, 2000; Rice and Harris, 2003). Two other studies (Aytes, et al., 2001; Hildebrand, et al., 2004) included as control groups sex offenders who had failed to complete treatment when it might have been equally appropriate to consider the failure of those offenders to be a poor outcome of a treatment endeavor rather than consider them as similar to offenders who never received treatment.

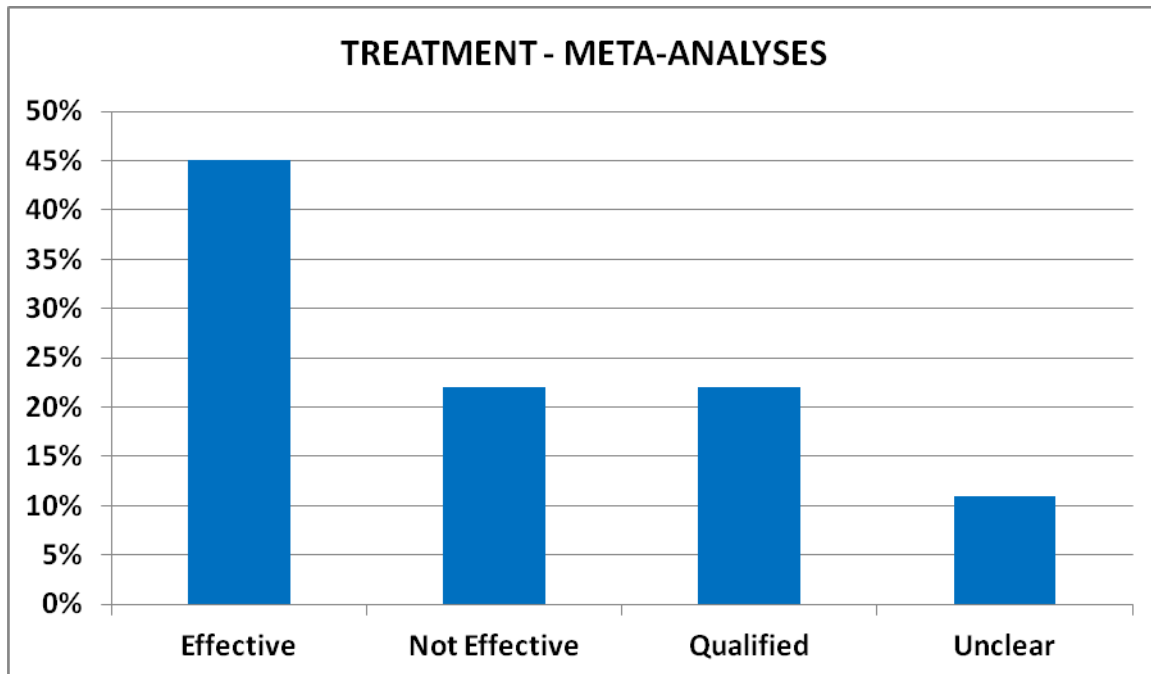
Another study showed a robust treatment effect (Maletzky, et al., 2006) but it should be noted that the treatment employed was hormonal/pharmacological, not the standard cognitive/behavioral treatment employed by most sex offender treatment programs.

As already noted, one study which found no significant effect of treatment on sexual recidivism did find a significant positive effect of treatment on violent recidivism and overall recidivism (Lowden, et al., 2003). The authors concluded, in part, that sex crimes were the least commonly reported offenses making it difficult to compare groups using only measures of sexual recidivism.

### *Findings – Meta-analyses.*

A little less than half of the meta-analyses surveyed concluded that treatment can be effective in reducing recidivism, a little less than a fourth concluded that treatment had no statistically significant effect in reducing recidivism, and about a third provided qualified or unclear results.

Table 2 summarizes the findings of the meta-analyses surveyed



**Table 2**

Of the 9 meta-analyses I reviewed, 4 (45%) concluded that treatment had a small but significant positive effect on lowering recidivism (*Gallagher, Wilson, Hirschfield, Coggeshall, and MacKenzie, 1999; Hall, 1995; Hanson, Gordon, Harris, Marques, Murphy, Quinsey, and Seto, 2002; Losel and Schmucker, 2005*).

2 of the 9 meta-analyses (22%) concluded that there was no such effect (*Furby, Weinrott, and Blackshaw, 1989; Kenworthy, Adams, Bilby, Brooks-Gordon, and Fenton, 2004*).

2 of the meta-analyses (22%) provided mixed results. One concluded that treatment had small but significant effects on recidivism but that the authors also cautioned that the findings must be “tempered” by the fact that most of the studies analyzed used weak (poor) research designs (*Hanson, Bourgon, Helmus and Hodgson, 2009*). Another found that cognitive/behavioral treatment programs significantly reduced recidivism but behavioral programs did not (*Aos, Miller and Drake, 2006*). I categorized both of these as “Qualified” findings.

The author of one meta-analysis (11%) suggested that her findings revealed that treatment was effective in lowering recidivism but did not appear to provide statistical analysis supporting the conclusion (Alexander, 1999). I categorized this as an “Unclear” finding.

### *Comments and Critiques – Meta-analyses*

Two of the meta-analyses which reported positive findings (Gallagher, et al., 1999; Hall, 1995) have been critiqued about the particular studies which were chosen for inclusion. The Gallagher et al. meta-analysis has been criticized for including studies with “significant threats to validity” including early reports of studies which were contradicted by later versions of the same studies (Hanson, et al., 2004). The Hall meta-analysis has been critiqued for including studies in which comparison groups were shown not to be equivalent; when these studies were removed from the analyses, the effect of treatment was no longer found to be significant (Hanson, Morton, and Harris, 2003; Harris, Rice, and Quinsey, 1998). Even so, I have included these analyses in the “Effective” category.

The authors of another meta-analysis (Losel and Schmucker, 2005) concluded that there is a significant effect of treatment on recidivism and that cognitive-behavioral treatments considered separately had a small but significant effect but much of the overall treatment effect appears to have come from studies in which treatment consisted of surgical castration. This analysis, too, is included in the “Effective” category.

Perhaps the most frequently cited recent meta-analysis is the ATSA Collaborative Outcome Data Project (Hanson, et al., 2002). The authors concluded that there was a small but statistically significant effect of treatment on sexual recidivism (12% recidivism for treated offenders and 17% recidivism for untreated offenders). It should be noted that the authors of one critique suggested that the findings of the Collaborative Outcome Data Project are weakened by the fact that many of the studies included in the meta-analysis had serious design flaws and so the authors concluded that there is “no convincing evidence” that treatment is effective in reducing recidivism (Rice and Harris, 2003). Even so, I have included this meta-analysis in the “Effective” category.

Alexander’s meta-analysis (1999) is sometimes cited as concluding that treatment is effective, probably because recidivism percentages derived from the analysis for treatment groups are somewhat lower than recidivism percentages for control groups, but, as noted, Alexander seems to offer little statistical analysis of the findings.

The two meta-analyses in which it was reported that no significant treatment effect could be demonstrated have been critiqued as well. The Furby, et al. analysis (1989) has been criticized because many of the studies included in the analysis focused on outdated treatment modalities. The Kenworthy, et al. analysis (2004) was withdrawn in 2008 pending an update.

It should also be noted that some other reviewers, while not conducting a formal meta-analysis, have offered conclusions about what research studies say about treatment effectiveness. For example, a review of studies conducted in 1991 by Marshall and colleagues concluded that there is “an unequivocally positive answer” to the question of whether sex offender treatment reduces recidivism (Marshall, Jones, Ward, Johnston, and Barbaree, 1991). However, others criticized this review saying

that the authors' conclusion was not warranted because the review included too many studies that contained no adequate control groups and because the studies reviewed often could not ensure that comparison groups were equivalent (*Quinsey, Harris, Rice, and Lalumiere, 1993*). Another group of reviewers (*Polizzi, MacKenzie, and Hickman, 1999*) found that in their survey of 21 sex offender treatment programs only 13 were of high enough scientific merit to warrant attention and of those "approximately half showed statistically significant findings in favor of sex offender treatment programs" while half did not.

### ***Summary***

It appears the research on treatment effectiveness is mixed and it is not entirely clear whether treatment programs have been shown to lower sex offense recidivism in adults once they leave the treatment programs. Some individual research studies suggest that treatment lowers recidivism but others do not or offer mixed findings. The findings of meta-analyses seem more encouraging but are not unanimous or absent critiques.

### ***Trends?***

Some treatment approaches appear to show more promise than others, particularly those which target specific groups of offenders, or provide intensive treatment and supervision for longer periods of time, or adhere to "Need" and "Responsivity" principles.

Marques et al. (2005) indicated that a combination of treatment response measures was found to be a significant predictor of sexual re-offense in high risk offenders suggesting that some form of treatment might eventually be effective with these offenders. The authors also reported that offenders who demonstrated better understanding of therapeutic concepts during treatment had better outcomes (they "got it").

Prolonged treatment and intensive supervision ("containment") may be important in lowering recidivism. The study of the Sex Offender Treatment Program at the Department of Corrections in Colorado revealed that re-arrest rates for all violent and sexual crimes (although, again, not specifically sexual crimes) were lower for offenders who remained in the DOC treatment program longer and who were subsequently placed on intensive parole supervision which included polygraph testing when released (*London, et al., 2003*). Similarly, the study of Virginia's sex offender containment programs indicated that recidivism (for all crimes, not simply sex offenses) was lower in two of three "containment" probation units (*Boone, et al., 2006*). It is interesting to note that Marques, et al. (2005) mentioned that this "containment" approach (*English, 1998*) might have improved the outcome of offenders in their study.

Other studies have provided similar findings. The study of the prison-based treatment program in Vermont revealed that both the length of time in treatment and the degree to which offenders received aftercare and correctional supervision following treatment contributed to lower recidivism (*McGrath, et al., 2003*). And, the study of the community-based treatment program in Oregon

indicated that the effect of treatment in lowering recidivism was particularly strong for offenders who remained in the treatment program for longer than a year (*Ayres, et al, 2001*).

Other studies suggest that nature of follow-up care is important. For example, one study found that providing offenders with increased support and opportunity to be accountable (through Circles of Support and Accountability Program) lowered recidivism following their release into the community (*Wilson, et al., 2005*). Another showed that high risk adult sex offenders living in a quasi-milieu setting which typically provides increased supervision and monitoring had significantly fewer violations of probation than adult offenders with other living arrangements (*Colorado Department of Public Safety, Division of Criminal Justice, 2004*).

Finally, Hanson, et al., (2009) found in their meta-analysis that treatment programs which better targeted criminogenic needs and delivered treatment in a manner that was more likely to engage offenders were more effective in reducing recidivism.



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