Sexual offender recidivism revisited: a meta-analysis of recent treatment studies

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Authors' objectives
To assess the effectiveness of different treatments for different types of sexual offender.

Searching
PsycLIT, PsycBOOKs, and reference lists of previously published reviews of outcome data on treatment for male sexual offenders, were searched from 1988 onwards for published studies not included in a previous review by Furby et al. (see Other Publications of Related Interest). Other restrictions, such as publication language, were not stated.

Study selection
Study designs of evaluations included in the review
Published studies with 10 or more participants, a comparison or control group, and reported recidivism data were included. Limited information was provided on study designs included.

The length of treatment varied from 4.5 to 60 months (mean 18.54 months; standard deviation, SD, 20.304) and follow-up from 1 to 20 years (mean 6.85 years; SD 5.95).

Specific interventions included in the review
The treatment modalities included behavioural, cognitive-behavioural, family therapy, group psychotherapy, hormonal (anti-androgen drug or castration), interpersonal, institutional programmes, individual psychotherapy, no-treatment comparison and medroxyprogesterone acetate.

Participants included in the review
Male sexual offenders, usually persons arrested for sexually aggressive behaviour including adolescents and men over the age of 17 years. Offences committed against women and children included rape, sexual assault, paedophilia, sodomy, exhibitionism and voyeurism. Studies were undertaken in out-patients and institutionalised care. Included studies were characterised by significant levels of participant exclusion from the analysis. Of the 80.9% (5,552 of 6,865 participants) excluded, the majority were associated with one study as a result of the non-matching of participants in treatment groups; removing this study left 35.8% of participants (620 of 1,733) excluded from the analysis. Excluded participants tended to be the most pathological participants, e.g. have extensive offences history, psychotic behaviour, organic brain syndrome, denied offences, or management problem in prison, or withdrew from the treatment programme.

Outcomes assessed in the review
Recidivism, i.e. additional sexually aggressive behaviour after a treatment period for participants who did and did not receive treatment, that led to official legal charges. Supporting evidence was provided by self-reports, or informal reports from agencies.

How were decisions on the relevance of primary studies made?
The author does not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
The authors do not report the criteria used to assess validity, or how the validity assessment was performed.

Data extraction
The author does not state how the data were extracted for the review, or how many of the reviewers performed the data
**Methods of synthesis**

How were the studies combined?

Individual effect size estimates were obtained for each study, to prevent any single study from disproportionately contributing to the results. The Pearson product-moment correlation was used as an estimate of effect size, with the correlation coefficients transformed to Fisher’s $z$ to normalise the distribution. Fisher’s $z$ scores were weighted for sample size, combined across studies and then divided by the sum of the sample size weightings for each study to produce a mean weighted Fisher’s $z$. These were transformed to a correlation coefficient, then to Cohen’s $d$. The fail-safe $N$ was calculated, i.e. the number of studies averaging null results required to change the overall significance of the result from significant to insignificant.

How were differences between studies investigated?

Heterogeneity was assessed through a chi-squared analysis based on the sum of the weighted squared standard deviations of Fisher’s $Z$ scores.

**Results of the review**

Twelve studies with 1,313 patients. Limited information was provided on study designs.

The recidivism rates for patients being treated were 19% (129 of 683 patients) compared to 27% (169 of 630 patients) for the comparison groups. The overall treatment effect ($r$) was 0.12 ($d = 0.24$), with a fail-safe ($n$) of 88 studies to bring the $p$ value to insignificant. Treatment effect sizes were significantly heterogeneous with chi-squared of 70.91 ($p<0.00001$), thought to reflect differences in the base rates of recidivism across the studies, the differences in study design, variations in participant pathology and differences in treatment effects.

**Authors’ conclusions**

This is an apparently robust result, although the authors suggest some caution in interpretation as only 12 studies were included and the analyses were affected by significant heterogeneity. In most studies over one third of participants were excluded on psychopathology, limiting the generalisability of the results. The results suggest the effect of treatment with sexual offenders is robust, albeit small, and that treatment is most effective with outpatient participants and when it consists of hormonal or cognitive-behavioural treatments.

**CRD commentary**

Although the review provides a detailed discussion of the underlying rationale, participants, outcome measures, inclusion criteria, search strategy and statistical methods, other aspects of the methodology of a good systematic review are excluded. The review does not provide any discussion of the validity criteria used to assess the primary studies or the processes by which decisions of relevance, judgements of validity and data extraction are undertaken. Such exclusions prevent an assessment of the effects of bias in the inclusion, extraction and interpretation of the primary studies. No cost effectiveness information is provided. As mentioned by the authors, the results of the review should be interpreted with caution due to the limited number of studies included, the exclusion of over one third of participants according to psychopathology and the effects of significant heterogeneity. Heterogeneity was thought to reflect differences in the base rates of recidivism across the studies, the differences in study design, variations in participant pathology and differences in treatment effects. Although establishing that treatment appears effective compared to control, the review appears to have very limited generalisability.

**Bibliographic details**


**PubMedID**
Other publications of related interest

Indexing Status
Subject indexing assigned by NLM

MeSH
Androgen Antagonists /therapeutic use; Cognitive Therapy; Combined Modality Therapy; Follow-Up Studies; Humans; Male; Recurrence; Sex Offenses /prevention & control /psychology; Treatment Outcome

AccessionNumber
11996003253

Date bibliographic record published
31/03/1998

Date abstract record published
31/03/1998

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.