

## Anger management training - excerpt from Henwood et al (2015)

6.2.2. Methodological differences Various types of bias were present in the included studies. All the studies included were NRCTs which are considered to be more prone to bias than RCTs. Selection bias was particularly prominent. The direction of bias could not be ascertained, as some of the studies might be deemed to underestimate or over-inflate the treatment effects at the same time. Therefore, the results must be interpreted with caution.

Some studies did not report the appropriate data for meta-analysis. Attempts at contacting authors also bore little results since some of the studies were at least 20 years old and most of the data had since been discarded.

Another potential moderating factor was the lack of integrity and treatment fidelity reported in some studies. This could have potentially moderated the overall effect. Such bias could have been introduced through different staff competencies and different sites in which interventions were delivered. For instance, Study 14 stated that psychologists were frequently replaced by students and rehabilitation staff who often had extensive experience in social work but little experience in working with offenders. However, treatment integrity is in fact considered essential for an effective correctional system (Howells, Watt, Hall, & Baldwin, 1997; Howells et al., 2002). These issues might have introduced considerable methodological diversity which could have affected the accuracy of the reported results.

A small sample size in some of the included studies may have introduced a within-study bias, since the random effects model might give them more weight (Deeks et al., 2008; Kjaergaard, Villumsen, & Gluud, 2001).

Furthermore, the lack of appropriate data in some included studies limited the number of studies included in the meta-analysis and consequently the possibility of further analysis such as metaregression. This may have also introduced artificial bias due to the exclusion of studies.

[...]

Most of the included studies indicate a decrease in re-offending especially when the focus is on violent reconviction, albeit not always statistically significant (e.g. Study 2). This supports the results of the RR analyses carried out. In fact, Studies 1, 4, 5, 7, 8, 14 reported significant differences in general re-offending for high-risk groups. Studies 2, 4, 5, 7, 8, 12 and 13 all reported significant differences on violent reoffending between treatment and control groups. Other studies 9, 11 reported that these differences became significant only when the attrition or non-completers were removed from the analysis.

The analyses also indicate that the less intensive anger management seemed to be the most effective treatment modality in reducing offending behavior especially violent offending.

[...]

Anger control dysregulation often plays a significant role in violent offending. The findings from this review seem to support this claim that when anger control is addressed, violent recidivism in particular would be reduced. This may apply for both intensive violence reduction programs whose program components place heavy emphasis on anger management modules and the less intensive anger management.