

A systematic review of selected interventions to reduce juvenile re-offending

Report written by Mark Newman, Carol Vigurs, Amanda E. Perry, Glyn Hallam, Elizabeth P.V. Schertler, Mathew Johnson, Ruth Wall

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TECHNICAL REPORT

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The results of this systematic review are available in
three formats. See over page for details.

The results of this systematic review are available in three formats:

**REPORT
SUMMARY**

Describes the background and the findings of the review(s) but without full technical details of the methods used

**TECHNICAL
REPORT**

Includes the background, main findings, and full technical details of the review

DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at <http://eppi.ioe.ac.uk/reel/>

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List of abbreviations

CBT	Cognitive Behavioural Therapy
EPPI-Centre	Evidence for Policy and Practice Information and Co-ordinating Centre
MTFC	Multi-dimensional Treatment Foster Care
UK	United Kingdom
US	United States of America
WoE	Weight of evidence

Abstract

What do we want to know?

This is a report of the methods and results of a systematic review of primary research on the effectiveness of selected interventions to reduce juvenile re-offending. The review provides answers to the question of the relative effectiveness of a small number of selected interventions in reducing juvenile re-offending.

What did we find out about interventions?

Consistent evidence of reducing re-offending

- Pre-sentencing Diversion - personal skill training + for first time offenders. The intervention included:
 - o personal skills training/ counselling which is about anger management, personal responsibility and decision making.
 - o some form of reparation to the community/ victim of crime.
 - o family involvement.compared to standard diversion (caution & monitoring).
- Community based family residential placement for female juvenile offenders. The intervention included:
 - o Residential placement for six months to a year in small group supportive 'family type' environment.
 - o personal skills training/ counselling which is about anger management,

personal responsibility and decision making.

- o Monitoring and use of appropriate incentives and sanctions.
- compared to standard residential placement.

Promising effects (positive or negative) limited or inconsistent evidence

- 'Teen Courts' compared to other diversion - Positive
- Community based family residential placements compared to standard residential placements for male juvenile offenders - Positive

Insufficient evidence

- Secure incarceration compared to community sentence
- Psycho-dynamic counselling compared to 'normal' Court interventions
- Pre-sentence diversions compared to court community sentence
- Multi component diversion for persistent offenders (comparison not clear)
- Multi-component diversion for mixed groups of offence severity (comparison not clear)
- Supported transition from secure incarceration to community compared to no or limited support
- Probation plus sports counselling compared to probation only
- Violence re-education programme compared to court imposed community service

CHAPTER ONE

Background

1.1 Purpose and rationale for the review

Persistent juvenile re-offending remains an area of concern for public policy, due to the social, economic and health impacts of such offending on victims and offenders. The research literature on juvenile offending is voluminous, reflecting the persistent nature of public concern on this issue. However the relevant research literature is largely disorganised and widely distributed in different media and across different countries. There is therefore a need for systematic reviews of research, in order to produce systematic transparent summaries of the research evidence that can be used to aid policy making.

1.2 Policy and practice background

The majority of recorded offences are committed by offenders i.e. people who already have a conviction or caution. Of the approximately 841,000 primary offences recorded in 2011 approximately 75% were ‘further offences’. 62% of juvenile offenders committing offences in 2011 had 1 or more convictions or cautions (Ministry of Justice 2012). Reducing rates of re-offending is therefore a key part of reducing the overall number of offences.

1.3 Research background

There is a voluminous literature on interventions to prevent juvenile re-offending. The results of a number of reviews of interventions to prevent juvenile offending are discussed alongside the results of this review in chapter four.

1.4 Review question

This review was undertaken to assess the UK and international evidence on the impact of interventions designed to reduce juvenile re-offending. The review question specified by the review commissioners was:

Which interventions for juvenile offenders lead to a reduction in re-offending?

The commissioning brief also asked for information about reducing the frequency and/or severity of offending. Only one study included in the review addressed these questions and this is reported in the relevant intervention category.

1.5 Scope and definitional issues

Juvenile offenders aged between 10-17 years were included in the review. Studies containing overlapping samples (e.g. 13-20) were considered for inclusion where the mean age of the sample was not greater than 15.5 years of age. In studies where only the age range was reported, the span of ages must have included participants aged between 10 and 18 years of age. Offenders were defined as individuals

under the care of the Criminal (or juvenile) Justice System at the time of the study. This included individuals on parole, probation, in jail or in any other secure detention setting.

In this review, the term ‘offending behaviour’ includes any outcome measure relating to criminal activity. The definition of offending behaviour includes measures of amount, frequency or severity of offending, or new convictions. Such measures are often reported either by the study participants themselves (i.e. self-report) or through official records (i.e. police, court or prison databases).

1.6 Authors and funders of the review

The review team comprised of members of staff from the Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre) and The Centre for Criminal Justice Economics and Psychology (CCJEP). The study was funded by the UK Ministry of Justice.

CHAPTER TWO

Methods used in the review

2.1 Review process

The review was undertaken in a number of stages. The first stage consisted of identifying all studies that met the review inclusion criteria. Descriptive information about these studies was collected and as a ‘map’ of research in the field of interventions to reduce juvenile re-offending. At this point there were 94 studies included the map. A further round of coding was undertaken to help identify sub-groups of studies. The results of this coding were discussed with the steering group and a decision was made at that point to focus on a number of subgroups for the in-depth review. At this stage detailed data extraction was undertaken to assess the quality of the studies and facilitate synthesis of the findings of the selected studies in order to provide answers to the review questions.

2.2 User involvement

The advisory group (see Appendix 1.1) met with the review team at an early stage to finalize the scope of the review and met again to discuss the interim report of the review (map) and agree the focus for the in-depth review.

2.3 Identifying studies

2.3.1 Defining relevant studies: exclusion criteria

The inclusion criteria were developed based on the commissioners’ specification and subsequent discussion amongst the steering group about priorities and needs in relation

to intervention type. Interventions were excluded because they had been or were the subject of earlier systematic reviews and/or were considered to be of lower priority by the commissioners. The exclusion criteria are given in Appendix 2.1. The cut off date for inclusion of studies was the date of publication of the earlier review by Lipsey & Wilson (1998).

Studies had to ‘test’ whether or not a particular method, approach or programme reduced recidivism amongst those juvenile offenders who received it. The method, approach or programme tested in each study is referred to as the experimental intervention throughout the report.

2.3.2 Identifying potential studies: search strategy

Full details of the search strategy are in Appendix 2.2. A range of sources were searched for potential studies including bibliographic databases, contacts with experts, searches of key websites, the internet and citation searches of recent relevant reviews. Key search terms were determined by the research question and inclusion criteria; these were supplemented by further key search terms identified from 61 papers identified by the Ministry of Justice. The EPPI-Centre’s specialist web based systematic review software ‘EPPI-Reviewer’ was used to keep track of and code studies found during the review. Searches were completed in early 2007.

2.3.3 Screening studies: applying inclusion and exclusion criteria

Inclusion and exclusion criteria were applied successively to titles and abstracts. Full reports were obtained for those studies that appeared to meet the inclusion criteria or where there was insufficient information to conclusively determine the study's eligibility for the review based on the title and abstract alone.

2.4 Characterising included studies

Included studies were coded for contextual (i.e. characteristics of the intervention and population) and methodological information using a coding tool developed specifically for this review (see Appendix 2.3 for a copy of the coding tool).

2.5 Assessing quality of studies and weight of evidence for the review question

Studies where the outcomes of the group of offenders receiving the intervention were not compared to the outcomes of a group of offenders not receiving the intervention (i.e. where there was no control group) were excluded from the review.

All studies meeting the inclusion criteria were assessed for quality and relevance using the EPPI-Centre's Weight of Evidence (WoE) framework. This framework has four elements incorporating The Maryland Scientific Methods Scale (Farrington et al. 2002) and the Home Office Quality Assessment scale (Harper and Chitty 2004) (see section F.4 and M of Appendix 2.3 respectively), yielding the WoE Framework as shown in Appendix 2.4.

In situations where offenders have not been randomly allocated to either the intervention or control groups (thus minimizing the risk of systematic differences in the characteristics of the two groups) researchers often try to 'minimize' the effects of any such differences through statistical analysis. Where this was the case the review team used the 'raw' outcome data reported in the studies to create effect sizes for the purposes of synthesis and therefore the quality scores are for these data.

The review team felt that given the defined scope of the review the main relevance consideration (WoE C) was transferability of context (e.g. from one country to another). It was felt that this was a 'judgement' that would need to be made by review readers and thus the WoE C score was 'fixed' at medium for each study.

The overall WoE (D) score for each study can therefore be seen as an indication of the confidence of the reviewers about the extent to which differences in the characteristics of the participants in the intervention and control groups in a study could be eliminated as an explanation for the results found in the individual studies.

2.6 Synthesis of evidence

The review question is specifically concerned with evidence about preventing re-offending. As stated in chapter one, any measure of comparative offending between the intervention and control groups was potentially includable in the review. Because all the studies were evaluating interventions with individuals who had already offended (i.e. they were not prevention studies) the outcomes can more accurately be termed measures of re-offending.

The organizing principle of the synthesis was provided by the review question which concerned the relative effectiveness of different types of interventions. Prior to the synthesis of outcomes it was hypothesised that outcomes of studies may vary depending on;

- the nature of the intervention.
- the quality of the study.
- the type of recidivism outcome measured.
- the length of follow-up (i.e. the point in time at which outcomes were measured).
- the type of offender (i.e. first time or persistent).

The synthesis was undertaken with the aim of exploring patterns of effect sizes using these study characteristics.

The categorization of the nature of the intervention was determined both by the authors' description and by the reviewer's interpretation of the underlying mechanism of change. This allowed the reviewers to group together similar intervention types. The categories of 'type' of mechanism of change were developed from the descriptions of the interventions supplied in the study papers. Three members of the review team each read these descriptions and independently developed a typology that covered all the interventions included (see figure 4.0 in Appendix 3.1 for details of each mechanism). The reviewers then compared their individual categories and developed an initial framework. The same three review team members then independently applied the framework to the included studies. The reviewers then met and discussed their independent coding and again revised the framework and agreed upon the final coding for each study.

Studies reported a range of outcome measures in addition to re-offending measures but these were not included in the synthesis. Studies often reported several re-offence measures and/or several different analyses of the same outcome measure. The review team converted the different re-offending measures used in the individual studies (although all were measures of recidivism) to a standard metric that facilitated combination of the individual study results into a weighted average effect size for interventions of a particular type and comparison between the results of the individual studies. The standard metric used is referred to as an effect size. These were calculated from either the raw outcome data and/or the statistical 'result' given in a study. Where data was not available to calculate an effect size the review team contacted the study authors to obtain it. All recidivism outcomes for which effect sizes could be calculated were included. Where there was more than one effect size calculated for a study, the outcome that was most similar to the outcomes used in the other studies in the same intervention type group was used in any meta-analysis.

The synthesis explored the following patterns:

- Does the effect favour the experimental intervention or control intervention?

- Is the direction of effect the same or different across similar experimental interventions?
- How small or big is the effect size?
- Does the effect size estimate exclude the possibility of the opposite effect?

The statistical technique of meta-analysis was used to produce a weighted average of the individual study effect sizes in each group. This was only undertaken where there was at least one high or medium quality study of a particular intervention. Meta analysis was completed using techniques (fixed and random effect models) that give different weightings to each individual study and the statistical estimates of the similarity between the studies included in the meta-analysis are provided in each case where a weighted average effect size is given.

2.7 Process for deriving implications

An interpretation framework was developed in order to help summarize and interpret the strength and outcome of the evidence provided for each intervention. The framework uses the number and quality of the studies that have evaluated a particular intervention. Where the number and quality of studies is judged to be sufficient then the weighted average effect size and/or directions of effect in each individual study are taken into account. The framework builds on that used in the Maryland Scientific Methods Scale (Farrington et al. 2002) but uses more appropriate headings for categories and requires a more rigorous methodological standard for concluding that there is 'consistent evidence of effectiveness in reducing re-offending'. Further details are provided in Appendix 2.5.

2.8 Quality assurance process

The search strategy was developed iteratively and piloted on a range of databases.

At the selection and coding stage all review team members participated in exercises where they screened and coded a sample of the same studies and compared the results and discussed them in detail, in order to facilitate consistency of interpretation. Each abstract/ title was then screened by one reviewer. Where a reviewer

was unsure about whether a study should be included or excluded this was referred to the Principal Investigator (MN) for a second opinion. At the analysis stage data checking was undertaken to identify and correct any coding errors.

At the in-depth review coding stage (where quality of study is assessed) two reviewers completed an independent data extraction for each included study. All finalised data extractions were then checked by the Principal Investigator.

CHAPTER THREE

Results

3.1 Selecting studies for the in-depth review

14,763 papers were identified for screening through systematic searches of 60 search sources. A breakdown of where the studies were identified is given in table 3.1 in Appendix 3.1.

3.2 Selecting studies

Of the 14,763 papers identified 4330 were duplicates. The remaining references were screened on title and abstract. Ten papers selected for full text screening could not be obtained. After application of the selection criteria 29 studies reported in 26 papers were included. Table 3.2 in Appendix 3.1 provides a summary of the results of the screening process. One study was excluded as published before 1998 although it was published in 2000 because the data were collected in the early 1990s and results published in previous papers in 1993 and 1996.

3.3 Review questions answered by the studies

Initial analysis of the studies indicated the studies answered three sub questions of the broad review question:

- The effectiveness of a pre-sentence diversion programme v community sentence (see section 3.4 for details).
- The comparative effectiveness of selected different pre-sentencing diversion programmes (see section 3.5 for details)

- The comparative effectiveness of selected different interventions received within the context of a sentence (post-sentencing studies) (see section 3.6 for details).

All pre-sentence diversion interventions shared a common approach in that they ‘diverted’ the juvenile offender away from the formal criminal justice system, on the basis that entry into the criminal justice system itself creates an additional risk of re-offending. All post sentence interventions shared a common approach in that the interventions formed all or part of a sentence given in the formal juvenile justice system. The exact nature of what offenders were required to do in both the pre- and post sentencing interventions varied but the experimental interventions in both pre-and post sentencing categories shared to differing degrees similar underpinning philosophies of, punishment/reparation/protection, facilitating the learning of pro-social and real world skills by the offender and diversion from temptation of crime as illustrated in the shaded boxes in figure 4.0 in Appendix 3.1. Within the pre-sentencing category the studies were grouped for synthesis by type of intervention according to what the reviewers felt were the shared mechanisms of change exemplified in each study. The ten clear boxes represent the different mechanisms identified. These mechanisms are related and the boundaries between each one permeable rather than entirely fixed.

In the post-sentencing category, studies were grouped for synthesis according to the review

sub-questions addressed by the studies. The mechanism of change analysis was only used in one of these sub-groups where the question was about the comparative effectiveness of ostensibly similar post-sentencing interventions.

3.4 Pre-sentencing diversion v community sentence

One study answered a question about the comparative effectiveness of a diversion programme compared to processing through the Juvenile court. Myers et al. (2003), evaluated 'Back-on-Track', a US multi-component diversion programme with a strong emphasis on early offenders at risk of re-offending compared to processing through the juvenile justice court. Recidivism data were collected at 1-year follow-up. This was a small study ($n=60$), which had a low overall weight of evidence. This means we cannot be confident that the results seen are due only to differences in the way which the offenders in the two groups were treated.

The results of the study indicated that offenders in the experimental diversion were less likely to have re-offended at 1 year ($g = 0.6$ 95% C.I 0.06 to 1.1).

3.5 Comparative effectiveness of different pre-sentencing diversion programmes

This group of studies answered questions about the comparative effectiveness of two or more different diversion programmes at reducing recidivism. The 'experimental interventions' were generally well described in the included studies. The 'control interventions' i.e. that received by offenders who did not receive the experimental intervention, was in most cases poorly described. This limits the practical conclusions that can be drawn from the findings.

The majority of the studies were conducted in the USA, three in the UK and one in Australia. All of the studies were 'diversion' schemes. In these schemes an offender who had been found guilty or had admitted guilt for an offence was 'diverted' from the formal Criminal Justice process to another kind of intervention. In seven studies the intervention was targeted at low risk or first time offenders and in five, at more persistent offenders.

3.5.1 Brief summaries of pre-sentencing diversion studies

A detailed summary of the studies included in the review is given in Appendix 3.2. All studies were undertaken in the USA unless otherwise stated.

In the study by Blechman et al. (2000), a standard juvenile diversion programme was compared against juvenile diversion programmes that included elements of restorative justice/ reparation and either personal skills training or mentoring. Arrest rates were compared for a mean follow-up period of 2.62 years.

In the four studies reported by Butts, Buck & Coggeshall (2002), four different Teen Courts were evaluated for their success in reducing recidivism. The outcome measure used in three of the studies was new delinquency referral within six months following the original referral. The fourth study used contact with the police as an outcome measure.

The study by Forgays & DeMilio (2005) evaluated a Teen Court for young offenders with at least one prior conviction, with sanctions focusing on elements of restorative justice. Arrest data were collected for 6 months following the court appearance.

The study by Nee & Ellis (2005) evaluated a multi-component intervention in the UK that employed a various combinations of mentoring, anger management classes, substance misuse treatment and outdoor activities. Arrest data were collected from the police six months post intervention.

Franklin et al. (2002) evaluated a diversion programme that focused on highlighting the medical and societal consequences of fire setting behaviour to fire setting youths. Measures of fire setting and arson recidivism were collected from fire department records over a follow-up period ranging from eight to 24 months.

Hanlon et al. (2002) evaluated an early intervention and crime prevention programme for at-risk inner-city youth (youth with prior convictions), offering counselling services for neighbourhood youth referred for delinquent

and other problematic behaviour. Recidivism data were collected at one-year follow-up based on offender self-reported contact with juvenile authorities.

Kelley, Kennedy, & Homant (2003) evaluated a treatment intervention targeting shoplifters. Personalized programmes for each offender could include fines, community service, monetary restitution, written essays, anti-shoplifting videos, apology letters, and individual and/or family counselling. Recidivism data were new petitions/ court appearances collected over a two-year follow-up period.

King et al. (2001) evaluated an Afro centric pre-court diversion scheme involving weekly classes on substance misuse, life skills, social skills and a specific focus on 'cultural regrounding'. Intervention youth were followed-up for an average of 583 days after their 18th birthday. Different outcomes were measured including arrest, 'guilty' sentence, and /or imprisonment.

Lobley, Smith & Stern (1999) evaluated the Apex Cueten project, a multi-component programme in the UK for persistent offenders. The programme brokered opportunities for education and employment, offered behavioural counselling and educational/ vocational training. Length of follow-up ranged from 12 months to 24 months. The recidivism outcome measured was reconviction.

Lobley, Smith & Stern (2001) evaluated 'Freagarrach', a multi-component diversion programme in the UK which targeted persistent offenders. The programme included a personalised treatment contract which included supervision and monitoring, counselling, referral to appropriate services and provision of personally challenging opportunities. Recidivism data based on charges, convictions and custodial sentences were collected at two-year follow-up.

Nee & Ellis (2005) evaluated a multi-component pre-court diversion programme for persistent young offenders. The programme included counselling, interpersonal skills training and cognitive behavioural therapy. Recidivism data were collected from police arrest records for 6 months after the intervention.

Patrick & Marsh (2005) evaluated three interventions. One was a personalized

staged pre-court diversion scheme involving reparation, community service, substance abuse classes and counselling. The second was a 'teen court'. The third was processing through the magistrates court. Recidivism data were collected for a two to three year tracking period but the actual type of outcome used was not reported.

Vignaendra & Fitzgerald (2006) evaluated a scheme that diverted offenders who already had a police caution into a youth justice conference in New South Wales Australia. The youth justice conference is a meeting which involves the offender, their family, members of the local community, the juvenile services and the victim. The aim of which is to develop a plan, to which all must agree, for the offender to 'repay' the victim/community and to enable them to avoid getting into further trouble. The outcomes measured were proven court appearance and/ or custodial sentence for up to five years following the intervention.

Weisz, Lott & Thai (2002) evaluated a Teen Court. The outcome measured was court appearances assessed approximately one year after the first Teen Court appearance.

Welsh, Jenkins & Harris (1999) evaluated a multi-component pre-court diversion scheme that included programmes to deal with specific health problems (including drug/ alcohol treatment), anger/ aggression management, educational/ vocational training, life-skills training and field trips. Recidivism data were taken from juvenile justice records at one and two-year follow-up.

3.5.2 Quality of pre-sentencing diversion studies

Table 3.3 in Appendix 3.1 shows the quality assessment scores for each study. The overall WoE score for each study is an indication of the confidence reviewers felt that the study design and execution in that study could reasonably exclude factors other than differences in the intervention experienced by the offenders as the 'cause' of the result.

3.5.3 Information about the experimental pre-sentencing diversion intervention

The mechanisms of change identified for each study are given in table 3.4 in Appendix 3.1. Studies were then grouped according to the common characteristics that they shared. One study (Butts, Buck & Coggeshall 2002) reported the evaluation of four different Teen Court implementations. However each intervention was similar so only one entry on the mechanism of change table is given. In two of the studies (Blechman et al. 2000; Patrick & Marsh 2005) more than one experimental intervention was compared to a control group therefore each experimental intervention was coded separately. The pre-sentencing diversion interventions were labelled in many different ways by the authors of the studies and most interventions blend several different combinations of components in some way.

Patterns in the mechanism of change analysis combined with identification of the offender group targeted by the intervention and the control group intervention produced four distinct groups of intervention evaluations within which synthesis was undertaken:

- Teen Court for first time offenders compared to other diversion (see section 3.5.4.1)
- Personal skills training Plus for first time offenders compared to monitoring and surveillance only (see section 3.5.4.2)
- Multi-component diversion interventions for persistent offenders compared to 'standard diversion' (see section 3.5.4.3)
- Mixed offender group multi-component diversion interventions compared to 'standard diversion' (see section 3.5.4.4)

3.5.4 Synthesis of evidence on pre-sentencing diversion studies

3.5.4.1 Teen Court for first time offenders compared to other diversion

This group of studies all investigated whether Teen Courts were more effective than other types of diversion at reducing re-offending. These interventions vary somewhat in the exact mechanisms used but a key common feature is that they use a quasi-judicial procedure run by

peers of the same age as the young offenders i.e. the common underpinning mechanism in this group is the central role of positive peer pressure.

Figure 3.1 shows the effect sizes for these interventions. With one exception (Butts, Buck & Coggeshall 2002-Maryland) the effect sizes all favour the intervention. In this particular study the recidivism outcome used was contact/arrest with the police, whereas in all the other studies the outcome measure is a charge or court appearance. The effect sizes in the individual studies did not vary systematically with length of follow-up.

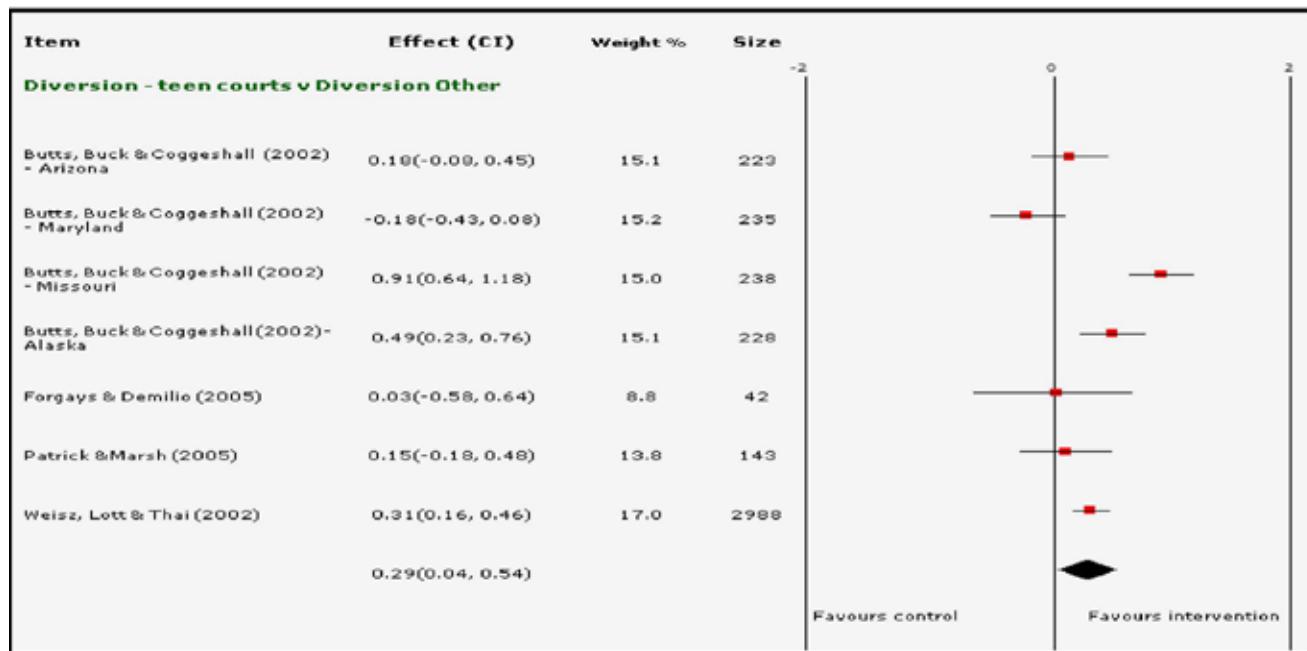
There is one medium WOE study (Patrick & Marsh 2005) therefore the individual effect sizes were meta-analyzed to produce a weighted average effect size of $g = 0.29$ with a confidence interval that excludes the possibility of negative or no effect. This was the case when both fixed and random effect models were used. However, the level of statistical heterogeneity at $I^2 = 83\%$ is considered very high raising concerns about the validity of the pooled estimate. Further rigorous research will therefore be required to establish the comparative effectiveness of teen courts.

3.5.4.2 Personal skills training Plus for first time offenders compared to monitoring and surveillance only

There were three studies in this category (Blechman et al. 2000, Kelley, Kennedy, & Homant 2003, Patrick & Marsh 2005) all of which targeted first time/ non serious offenders. The interventions in each study similar. They combined activities that tried to make the offender make the connection between their offence and its consequences including reparation of some kind, with a group of activities which can be identified as 'personal skills training' (hence we have used the label 'Personal skills training Plus'). The limited description of the treatment received by offenders in the control group provided in each study suggests that in each case the experimental intervention was compared to a diversion scheme that comprised of 'a caution' and monitoring by an official of some kind.

Figure 3.2 shows the effect sizes for the three studies in which the length of follow-up was roughly the same at two to three years. In each

Figure 3.1: Effect sizes (Hedges' g) Teen Court compared to other diversion (random effects model)



Heterogeneity statistic $Q = 37.1$ $df = 6$ $p = 1.72E-06$ $I^2 = 83.8\%$, Test statistic (combined effect) $z = 2.23$ $p = 0.0256$

of the three studies the effect size favoured the experimental intervention which means that those who received the experimental intervention had lower rates of re-offending. The effect sizes varied slightly between each intervention. The studies received either a medium (Blechman et al. 2000; Patrick & Marsh 2005) or high (Kelley, Kennedy & Homant 2003) WoE rating. Although the interventions all targeted first time offenders the study by Kelley, Kennedy, & Homant (2003) targeted a very specific sub-group of first time offenders (shoplifters) which may explain the greater effect size achieved in this study. The studies by Kelley, Kennedy, & Homant (2003) and Patrick & Marsh (2005) also included mechanisms to personalize the intervention and involvement of the family of offender which may have increased the effect of the intervention.

Meta analysis produced a positive average weighted effect size that excluded harm or no difference using both fixed and random effects models. The weighted average effect size for the three studies combined was a relative risk of 0.29 (95%CI 0.06 - 0.20). This means that on average the relative risk of re-offending amongst the offenders who did not receive the new experimental interventions was 29% greater than for those offenders that did. The

confidence interval suggests that the 'true' value lies somewhere between 6% and 20%.

The study by Blechman et al. (2000) compared two intervention groups and a control group. Mean number of days to arrest was longest for the 'diversion plus skills training' intervention (mean 930 days), followed by the control group diversion (mean 769 days).

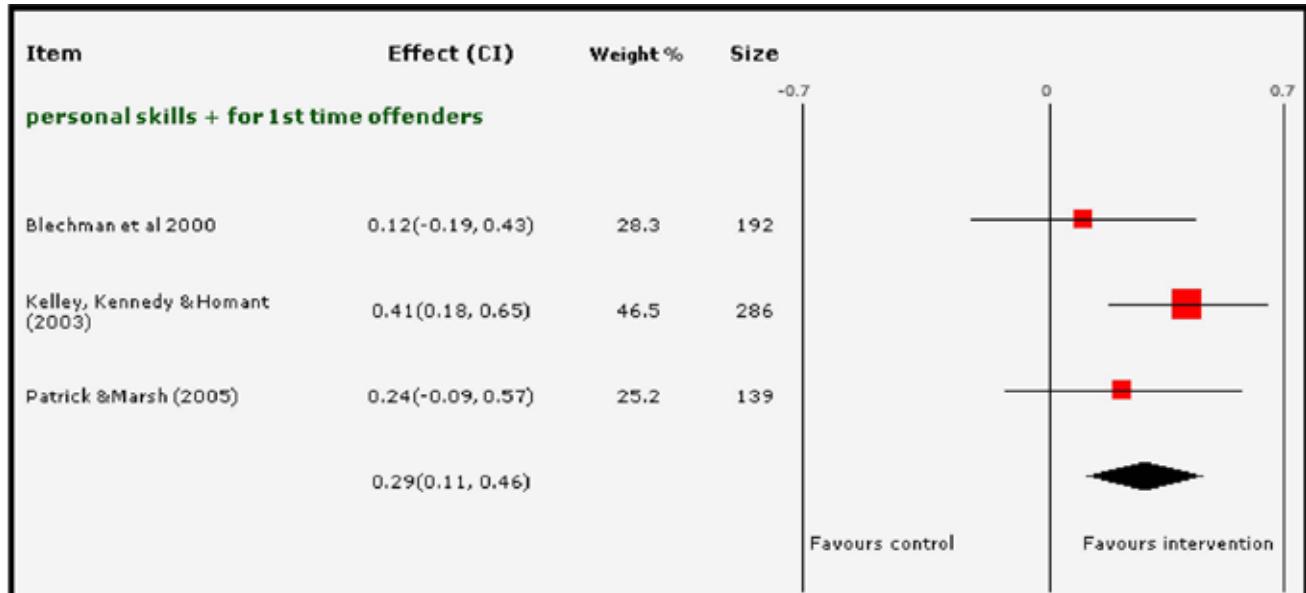
3.5.4.3 Multi-component diversion interventions for persistent offenders compared to 'standard diversion'

These interventions all used more than one mechanism of change in various combinations to reduce the risk of re-offending amongst participants. Three of these studies were carried out in the UK (Lobley, Smith & Stern 1999; Lobley, Smith & Stern 2001; Nee & Ellis 2005). The two effect sizes for Lobley Smith & Stern 2001 in figure 3.3 represent two different follow-up periods.

The forest plot of the effect sizes (shown in Figure 3.3) indicates that in all the studies except one the offenders who received the experimental intervention were less likely to re-offend. The exception was the study by Vignaendra & Fitzgerald (2006). However in this study the intervention and control group were clearly dissimilar in one

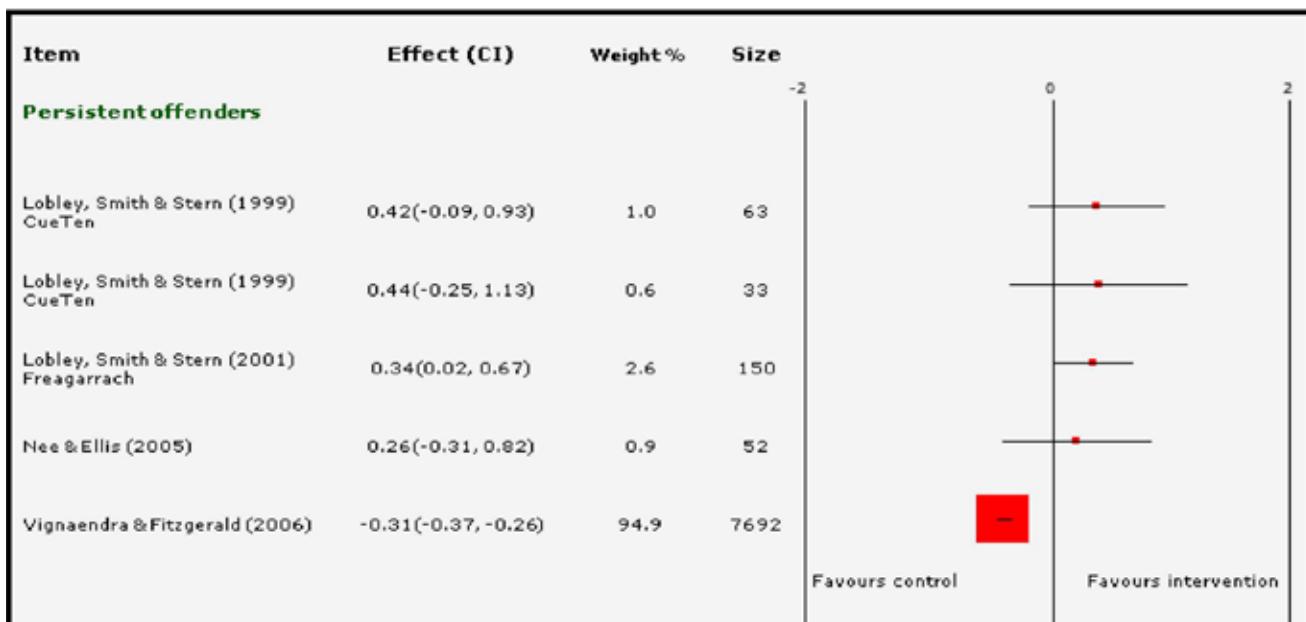
¹ Figure 3.1 is referred to as a forest plot. The effect sizes from each individual study are represented as a dot or small box on the forest plot the size of which varies in accordance to the size of the sample in that study. The black diamond is the weighted average effect size. The lines on each side of the dots and edges of the diamond represent the 95% confidence interval. This represents the range in which we can be 95% confident that the 'true' result lies. Larger samples will have narrower confidence intervals. For a positive effect size, where the lower confidence interval crosses the vertical zero line we cannot be confident that there is not a negative or harmful effect.

Figure 3.2: Effect sizes (relative risk): Personal skills training Plus for first time offenders compared to monitoring and surveillance only (random effects model)



Heterogeneity statistic $Q = 2.28$ $df = 2$ $p = 0.32$ $I^2 = 12.3\%$ Test statistic (combined effect) $z = 3.19$ $p = 0.00141$

Figure 3.3: Effect sizes (Hedges' g) multi-component diversion interventions for persistent offenders compared to standard diversion



important respect. Criterion for entry into the intervention was that an offender had to be eligible and eligibility required you to already have received a caution (a lower form of sentence). The control group were not eligible because they had not already received a caution. Hence the intervention group comprised of more severe offenders than the control group.

Further the follow-up period in this study (five years) was considerably longer than in the other studies in this group (six months to two years).

Given the limitations of these studies no further analysis was undertaken (note there is no pooled estimate of effect shown in figure 3.3).

3.5.4.4 Mixed offender group multi-component diversion interventions compared to 'standard diversion'

In these studies the offenders in the intervention groups were mixed in terms of type and severity of offending behaviour and the interventions all used more than one change mechanism in various different combinations. The study by King et al. (2001) reported numerous results and the effect size presented here is 'any adjudication after completion of the programme', which appears to be most similar to that used in the other studies in this group.

The plot of effect sizes (see figure 3.4) shows that in the studies by Welsh Jenkins & Harris (1999) and King et al. (2001) the results favoured the control group i.e. offenders who received the 'new' experimental intervention were more likely to re-offend than the offenders who did not receive it. In the study by Hanlon et al. (2002) the outcome is self-reported involvement with the criminal justice system which may contribute to the different direction of effect found in this study i.e. because self reporting may lead to under-reporting of 'poor' outcomes. The effect sizes in the individual studies did not vary systematically with length of follow-up.

Because all of these studies are of low quality we are not confident that the results are due to the intervention rather than to pre-existing differences between the offender groups compared. For this reason no weighted average effect size was calculated (note there is no pooled estimate of effect shown in figure 3.4).

3.6 The comparative effectiveness of selected different interventions received within the context of a sentence (post-sentencing studies)

3.6.1 Brief summaries of post-sentencing studies

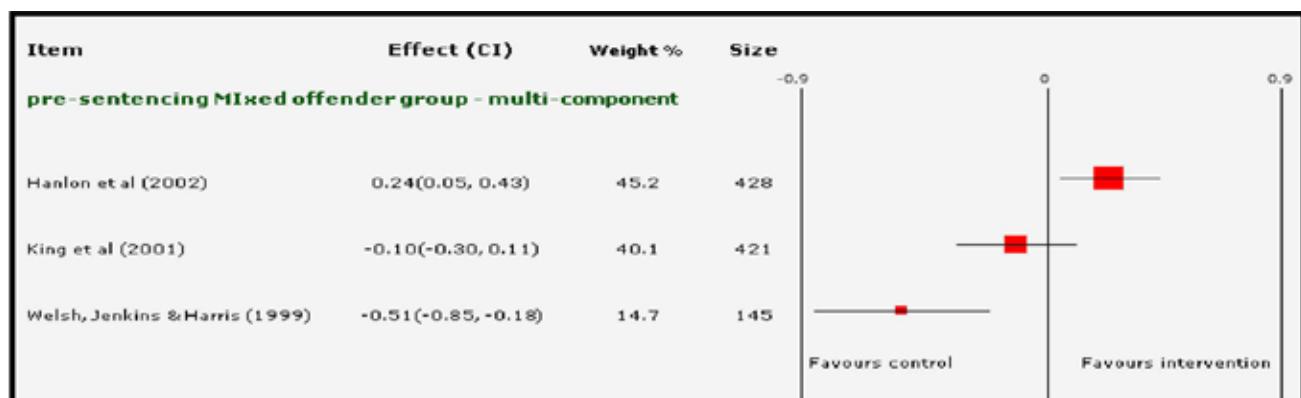
A detailed summary of the studies included in the review is given in Appendix 3.2. There was one study from the UK and the rest from the USA. In all the studies the experimental interventions took place outside secure settings.

The study by Bowers (2002), examined whether sentencing to alternative community programs was more effective than incarceration in reducing recidivism. The sample was mixed in terms of type of offence. The outcome measure used was arrest and follow up time was one to three years.

The study by Drake & Barnoski (2006) compared recidivism rates for youth who had been released under parole supervision with those that remained incarcerated for their full sentence. The sample was mixed in terms of type of offence. Recidivism data (convictions) were collected 12 months after release from either secure incarceration or parole supervision.

The second part of a two part-study by Florsheim et al. (2004) investigated the association between the time spent in different types of youth custody program and recidivism. The sample was mixed in terms of type of offence. Recidivism data (charges) were collected from police records six months after the intervention. The analysis in this

Figure 3.4: Effect sizes (Hedges' g) multi-component diversion interventions for mixed group of offenders



paper compared recidivism rates depending on the number of days spent in different types of sentence. It was not possible to calculate effect sizes for the type of analysis used.

Josi & Sechrest. (1999) evaluated a parole re-entry program (Lifeskills '95) which was an educational programme to promote/develop healthy decision making. Target youth were high-risk and chronic offenders who were released from secure confinement. The outcomes measured were arrest and/or incarceration and the follow up periods were at 90 days and 12 months.

The study by Litter (2005) evaluated the efficacy of group and individual psycho-dynamic counselling. The sample was mixed in terms of type of offence. Recidivism data (arrest) were collected after one school year cycle (nine months).

Nichols (1999) evaluated a sports counselling project which included personal coaching, counselling and participation in sport for probation service clients. The type of offences committed by the sample was not reported. The recidivism outcome measure was 'guilty sentence' and length of follow-up was 24 months.

Ryan, Davis, & Yang (2001) evaluated a residential programme designed to prepare participants for reintegration into their community that included pre-independent living, independent living, intensive in-home care and foster care. The sample was mixed in terms of type of offence. Recidivism data (re-incarceration) was collected on average 4.36 years after release from residential care.

Scott et al. (2002) evaluated a violence reduction programme provided by volunteer clinical staff in a hospital setting for youth at risk of re-offending. The sample was mixed in terms of type of offence. Recidivism (guilty sentence) was measured one year following the intervention.

Youngbauer (1998) evaluated family group care homes that employed a supportive teaching-family model (TFM) of care in a small group (six to eight people) setting. The intervention included group work for personal skills training, emphasizing personal responsibility for decision making and included monitoring

and use of appropriate incentives and sanctions. Male and female offenders were in separate homes and the subject of separate evaluations. The sample was mixed in terms of type of offence. Recidivism rates (arrests) were compared at a maximum time of 36 months post-programme.

The Oregon Multidimensional Treatment Foster Care (MTFC) model aimed to provide intensive community-based supervision, support and personal skills training under the guidance of specially trained foster carers. MTFC was originally developed as an alternative to residential care for boys referred for serious and chronic delinquency. The MTFC has been extensively reported but two empirical evaluation studies were identified for inclusion in this review. The study by Eddy, Whalley & Chamberlain (2004) evaluated the effectiveness of the Oregon MTFC model for chronic and serious male offenders. The study by Leve, Chamberlain & Reid (2005) evaluated the effectiveness of the Oregon MTFC for girls. In the male offender study the sample was mixed in terms of type of offence. Type of offence was not reported in the female offender study. The recidivism outcome measure was self-reported offender delinquency and the follow up periods, one year for girls and two years for boys.

3.6.2 Quality of post sentencing studies

Table 3.5 in Appendix 3.1 shows the quality assessment scores for each of the post-sentencing studies. The overall WoE score for each study is an indication of the confidence reviewers felt that the study design and execution in that study could reasonably exclude factors other than differences in the intervention experienced by the offenders as the 'cause' of the result.

3.6.3 Post sentencing studies synthesis

Analysis of the studies in the 'post-sentencing' category identified that the studies could be grouped together according to the sub-questions that they address:

- Is supported transition from a secure institution to the community more effective than unsupported transition in reducing subsequent re-offending (see section 3.6.3.1)

- Are community based ‘family’ residential placements more effective than ‘standard’ residential homes in reducing subsequent re-offending (see section 3.6.3.2)
- Which is more effective at reducing subsequent re-offending, secure incarceration or community placement? (See section 3.6.3.3)

The remainder of the studies each investigated specific interventions and are discussed under the category ‘Other’ (see section 3.6.3.4).

All studies could be located in one of these categories. One study, Drake and Barnoski (2006), addressed questions in two different categories and thus is included in both.

3.6.3.1 Supported compared to unsupported transition from secure accommodation back into the community

The interventions in this category targeted juvenile offenders leaving secure residential care and were intended to reintegrate these young people back into their communities with the aim of reducing the risk of subsequent re-offending (Drake and Barnoski 2006, Josi & Sechrest 1999, Ryan, Davis & Yang 2001). In addition to these three studies, the Florsheim et al. (2004) study examined the association between time spent in different Youth Correctional programs and adult recidivism.

Figure 3.5 shows the results for the studies in this group. The effect size in the study by Drake and Barnoski (2006) favours the control group i.e. the young offenders who did not get parole (and thus by implication any transitional support). By contrast the results from the other two studies favour the intervention i.e. the offenders who received transitional support were less likely to offend than those that did not receive such support. The effect sizes in the individual studies did not vary systematically with length of follow-up.

Florsheim et al. (2004) found that longer time spent in secure correctional facilities was significantly associated with higher adult criminality scores controlling for age at first arrest, age entered custody and delinquency severity ($\beta=0.18$ $p<0.05$). This result supports that of the Josi & Sechrest (1999) and Ryan,

Davis & Yang (2001) and would seem to directly contradict the findings of Drake & Barnoski (2006).

Although the Drake & Barnoski (2006) study was coded as medium quality the subsequent information provided by the author leads us to question the validity of the study findings. The other studies in this category were all given low quality WoE ratings meaning that we cannot exclude other potential explanation for the results such as pre-existing differences between the study participants in the two groups. The review team decided that because of the doubts over the validity of the Drake & Barnoski (2006) medium WoE rating² a weighted average effect size should not be produced and that further analysis of this subgroup should not be pursued. Note there is no weighted average effect size shown in figure 3.5.

3.6.3.2 Community based ‘family’ residential placements compared to ‘standard’ residential placements

Studies in this group investigated whether a small community family-like environment was more effective in reducing re-offending than traditional group residential homes for offenders who were mandated by their sentence to live in some kind of supervised accommodation away from their family. The study by Eddy, Whaley, & Chamberlain (2004) evaluated the impact of the Oregon Multi-dimensional Treatment Foster Care (MTFC) model on serious and chronic male offenders. The study by Leve, Chamberlain & Reid (2005) evaluated the impact of the MTFC model on female offenders. The Youngbauer (1998) study evaluated a Teaching-Family Model of out-of-home-community placement (TFM) and reports separate results for male and female juvenile offenders. In addition to these evaluations, the analysis in the paper by Florsheim et al. (2004) also included community residential accommodation.

Figure 3.6 shows the effect sizes for the different programmes for both male and female juvenile offenders. The effect sizes in both the MTFC studies (Eddy, Whaley, & Chamberlain 2004; Leve, Chamberlain, Reid (2005) favour the intervention and the confidence interval excludes no difference or harm. The TFM intervention (Youngbauer 1998)

² We contacted Dr Drake to obtain the data necessary to calculate an effect size. She informed us that subsequent to publication of the study she became aware that the treatment fidelity of the control may have been compromised during the study i.e. at least some of the people in the control group may have received the experimental intervention or even something superior to the experimental intervention interim of level of support.

Figure 3.5: Effect sizes (Hedges' g) supported compared to unsupported transition from secure accommodation to the community

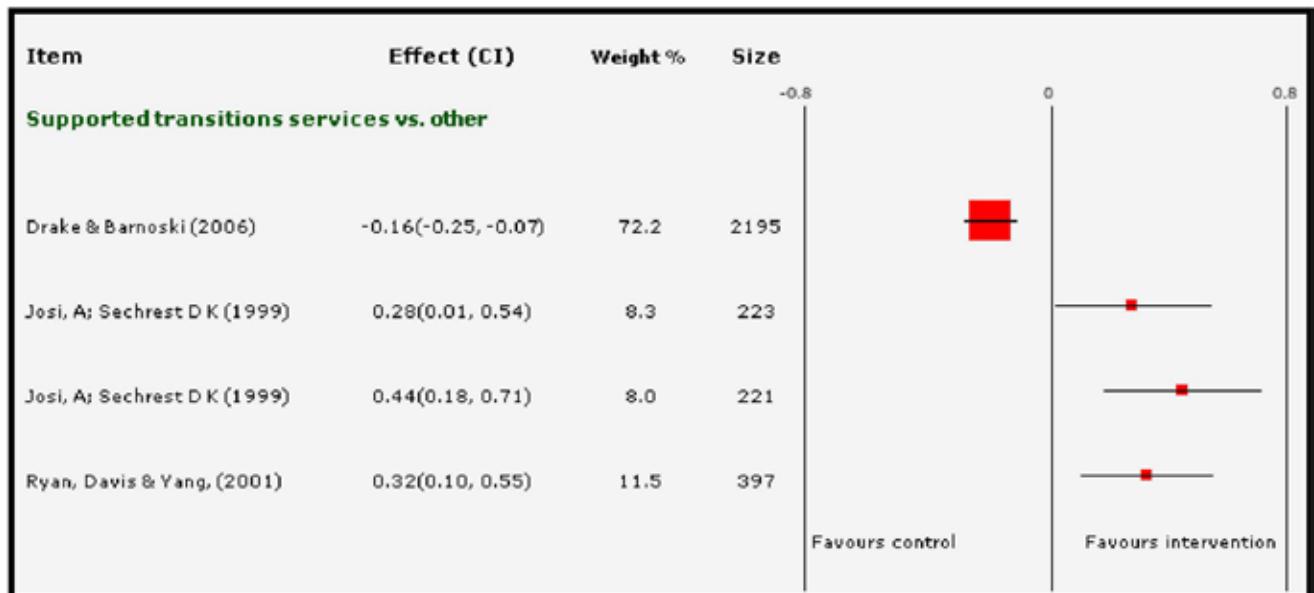
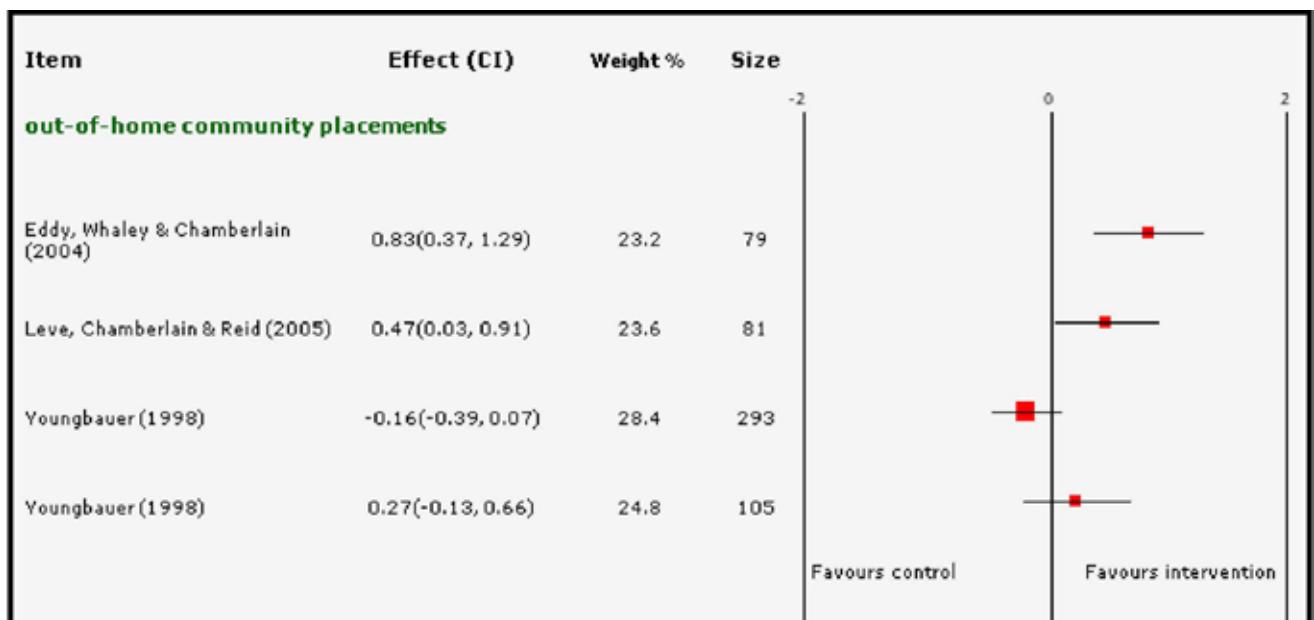


Figure 3.6: Effect sizes (Hedges' g) community based 'family' residential placements compared to 'standard' residential placement (random effects model)



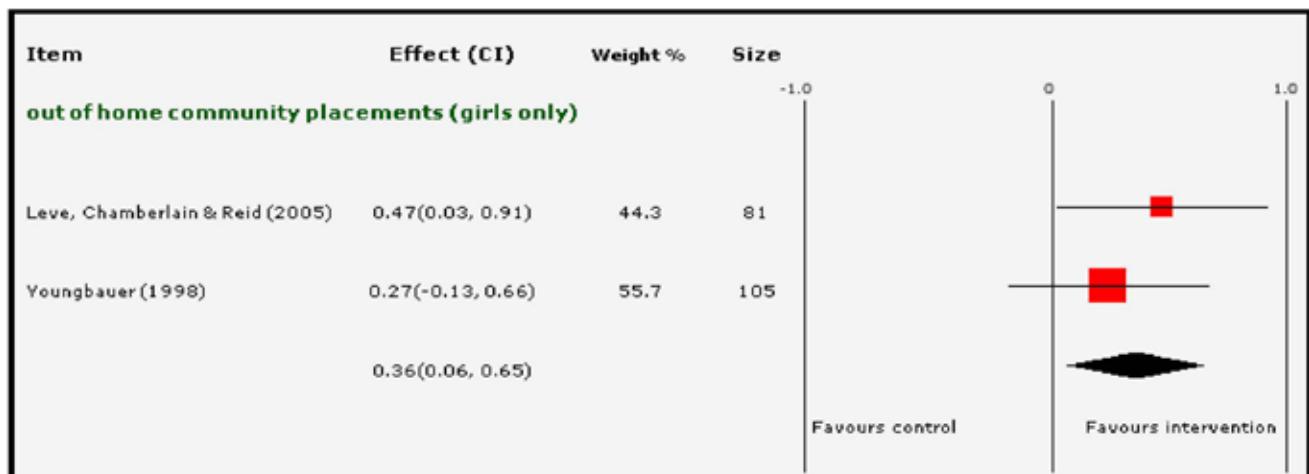
appears to result in increased re-offending amongst male juvenile offenders, and reduced re-offending amongst female juvenile offenders but both cases neither confidence interval excluded the possibility of 'no difference'. The length of follow-up in the TFM evaluation was three years compared to two (male) and one (female) in the MTFC studies. This may contribute to the smaller effects sizes seen in the TFM evaluation.

In the Florsheim et al. study (2004) the association between re-offending and time spent in three different types of community

'home placement' were analysed. Time that youth spent in group homes (equivalent to the control group in the other studies in this category) was associated with a statistically significant increased risk of adult criminality ($\beta = 0.15$ $p<0.05$). Time spent in Proctor Homes (equivalent to the experimental intervention in the other studies in this category) was associated with a reduced risk of adult criminality that was not statistically significant ($\beta=-.06$).

The Oregon MTFC studies (Eddy, Whaley, & Chamberlain 2004; Leve, Chamberlain,

Figure 3.7: Effect sizes (Hedges' g) community based 'family' residential placements compared to standard residential placement females only (random effects model)



Reid 2005) were given a medium WoE rating whereas the Youngbauer (1998) study was given a low rating. The mechanism of change analysis demonstrated that the experimental interventions in the two studies also differed slightly (see table 3.6 in Appendix 3.1). However, the different results for the male and female offenders in the TFM evaluation (Youngbauer 1998), suggest that differences in study quality and/or type of intervention between the MTFC and TFM studies are unlikely to be complete explanations for the pattern of results seen in figure 3.6.

One difference that is not detected by the mechanism of change analysis is that whereas the Oregon MTFC intervention is one to one i.e. one offender is placed with a one specially trained foster family (Eddy, Whaley, & Chamberlain 2004; Leve, Chamberlain, Reid 2005), in the teaching family model the offender is placed in a 'home with 6-8 other offenders' (YoungBauer 1998).

If the effect of this type of intervention is analysed separately for boys and girls then a possible explanation is suggested. As figure 3.7 shows, the effect sizes are positive for the female offender group in both the TFM (Youghauer 1998) and MTFC (Leve, Chamberlain & Reid 2005) studies. The average weighted effect size for female offenders is positive and excludes 'no difference' whether a fixed or random effects model is used.

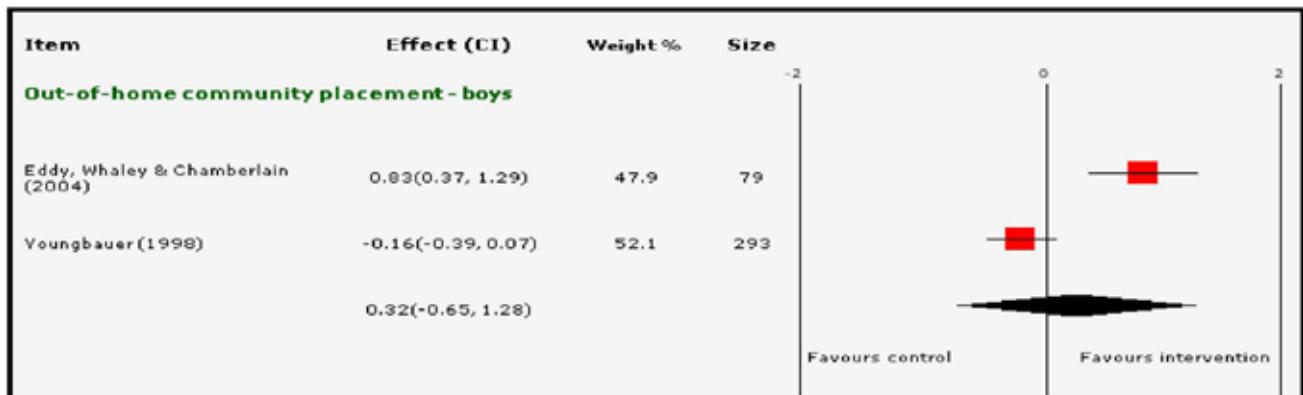
For the studies of male juvenile offenders the directions of effect for the two interventions

differ, as shown in figure 3.8 below. The MTFC (Eddy, Whaley & Chamberlain (2004) effect size favours the experimental intervention whereas the teaching family model (Youngbauer 1998) effect size favours the control intervention. The average weighted effect size favours the intervention but the confidence interval does not exclude 'no difference' or harm.

It is argued that these findings suggest that the size of the 'family' group affects outcomes for boys whereas it is less important for girls. This analysis is consistent with theories that suggest that the nature and consequences of peer group interaction may be different for boys and girls (Salmivalli, Kaukainen, Lagerspetz 2000). It is suggested that the fact that all of the sample in the Florsheim et al. (2004) analysis were male also supports this argument as one of the main differences between a 'Group Home' and a 'Proctor Home' is that the latter is provided to an individual offender.

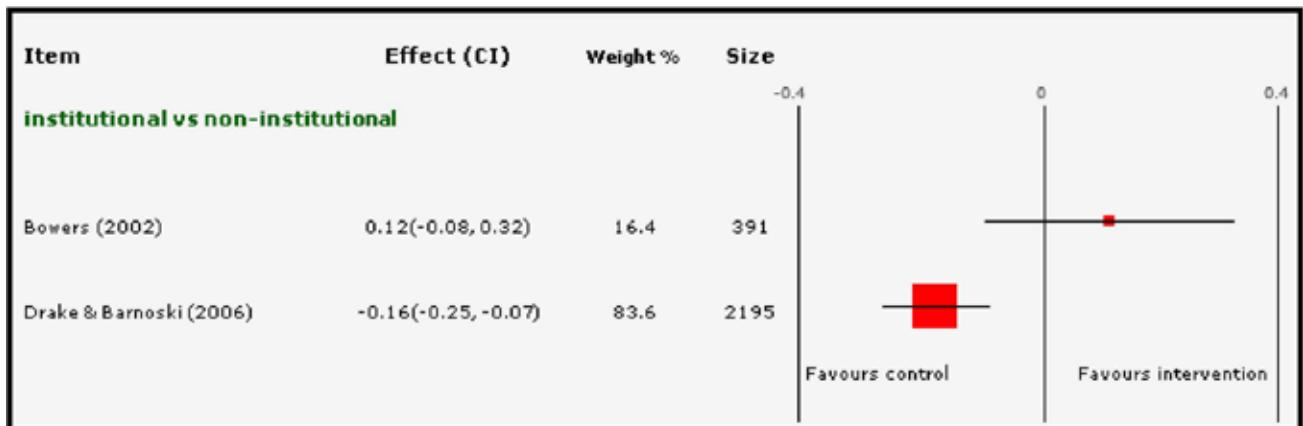
There is an economic analysis of the Oregon MTFC programme presented in one paper published about the programme (Chamberlain & Smith 2005 included in the review as a linked paper). However, this is a report of an analysis carried out as part of a cost-effectiveness analysis by Aos et al. (1999) so it is not clear where the financial data was originally derived from and therefore the reviewers could not check or substantiate the figures given.

Figure 3.8: Effect sizes (Hedges' g) community based 'family' residential placements compared to standard residential placement males only (random effects model)



Heterogeneity statistic $Q = 14.1$ $df = 1$ $p = 0.000172$ $I^2 = 92.9\%$ Test statistic (combined effect) $z = 0.639$ $p = 0.523$

Figure 3.9: Effect sizes (Hedges' g) secure incarceration v community placement sentence



3.6.3.3 Secure incarceration sentence compared to community placement sentence

Two studies evaluated whether alternative community placements were more effective in reducing re-offending than secure incarceration (Bowers 2002; Drake & Barnoski 2006). Florsheim et al. (2004) included analysis of the association between adult recidivism and length time of spent in detention.

The effect sizes shown in figure 3.9 show that the results were opposite for the two studies. The Bowers (2002) study result favoured community placement and Drake & Barnoski (2006) study result favoured incarceration. The length of follow-up was shorter in the Drake and Barnoski (2006) study (one year compared to up to three yrs).

The analysis by Florsheim et al. (2004) found that time spent in 'Detention' was significantly positively associated with adult criminality

($\beta=0.18^*$, $p<0.05$) i.e. the longer time spent incarcerated the more likely an offender was to re-offend.

The Drake and Barnoski (2006) study should more properly be considered as comparing a sentence which mixes shorter incarceration and parole with a sentence of incarceration only. As described previously the problems that have come to light about this paper raise questions about the validity of the result.

The Bowers (2002) study was also rated as low quality. Given the limitations of these studies further analysis was not undertaken.

3.6.4.4 Other post-sentencing interventions

All the studies in this category were given an overall low weight of evidence which means that factors other than differences in the intervention received by the experimental and control groups cannot be excluded as potential alternative explanations for the results found.

Litter (2004) evaluated the impact of psycho-dynamic counselling on re-offending. There were various sub group analysis presented based on variations in the group structures used (e.g. individual v group) in the experimental counselling session. The results found that the offenders in the psycho-dynamic counselling group were less likely to re-offend in the follow -up period of 2 years ($g = 0.67$ 95% C.I. 0.18 to 1.16).

In the study by Nichols (1999) the West Yorkshire Sports Counselling project for youth on probation was evaluated. The intervention included active sports participation and regular meetings with the sports leader for support, counselling and guidance on 'exit routes' from probation. Participation in the program was voluntary. Authors report that youth who had completed 8 weeks or more of the programme ($n=23$) were significantly less likely to re-offend compared to a matched control group of probation clients ($n=23$) ($p<0.02$). The follow up period was 2 years. They also used a 'Home Office reconviction formula' to estimate the observed v predicted re-offence rate for those who completed programme. This analysis estimated a predicted re-conviction rate over 2 years of 63.8% but the actual reconviction rate was 49% ($n=49$).

Scott et al. (2002) compared recidivism rates for violent offenders referred to a violence re-education programme based around the Trauma Experience, designed to forcefully bring home the consequences of violence on the young people participating. The reporting of the data on the findings in the study is particularly unclear. According to the authors the results suggest that offenders attending the experimental intervention programme were less likely to re-offend (violence related offences) than a matched group of controls who did not attend the programme. Based on the only data in the paper ('rates' of 0.05 and 0.33 for re-offending in the intervention and control group respectively with $n=38$ in each group) we calculated an effect size of $g = 0.75$ (95% C.I 0.28-1.21).

CHAPTER FOUR

Discussion and implications

4.1 Strengths and limitations of this systematic review

The main strengths of the review are:

- its systematic nature and the careful consideration given to the quality of the evidence.
- all relevant higher quality studies have been identified and selected for inclusion in the review.
- the review process is transparent, as well as replicable and updateable.
- presentation of the study results as effect sizes which facilitates direct comparison and synthesis of results across similar interventions.

The main limitations of the review are:

- A large number of ‘intervention types’ were excluded from consideration in this review. Meaning that all the different types of interventions for juvenile offenders are not compared in one review. However indirect comparison of results across systematic reviews could be carried out subsequently (see implications for research below).
- Funnel plot³ analysis (which is not shown here) suggested that smaller studies with negative effect sizes are under-represented in the review which may be indicative of publication bias in the field as a whole.

- Studies were limited to those published in English.
- There were comparatively few high quality studies on each intervention
- It was not always clear precisely how the experimental interventions differed from the control interventions so we cannot be sure that an experimental intervention in one study was not identical to a control intervention in another. Neither do we know to what extent control programmes in the included studies match current policy and practice in the UK context.

4.2 Implications

4.2.1 Approach and summary

Our approach to identifying possible implications for policy and practice was first to use the interpretation framework to group interventions according to the strength of evidence and direction of effect the results (see Appendix 2.5 for details). These are summarised in table 4.1. In the second stage the results for interventions identified in this review were compared to the results for the same or similar interventions given in two previous reviews of interventions for juvenile offending (Lipsey, Wilson and Cothorn 2000); Aos, Miller, and Drake 2006).

In the third stage the average weighted effect sizes for those interventions in the ‘Consistent

³ The effect sizes included in the review are plotted on a graph in which the other axis represents their sample size. If there is no publication or selection bias the resulting ‘picture’ should resemble an inverted funnel, hence the term funnel plot.

Table 4.1: Interpretation summary

Consistent evidence of reducing re-offending
<ul style="list-style-type: none"> Pre-sentencing Diversion - personal skill straining + for first time offenders. The intervention included: <ul style="list-style-type: none"> personal skills training/ counselling which is about anger management, personal responsibility and decision making. some form of reparation to the community/ victim of crime. family involvement. <p>compared to standard diversion (caution & monitoring).</p> <ul style="list-style-type: none"> Community based family residential placement for female juvenile offenders. The intervention included: <ul style="list-style-type: none"> Residential placement for six months to a year in small group supportive 'family type' environment. personal skills training/ counselling which is about anger management, personal responsibility and decision making. Monitoring and use of appropriate incentives and sanctions. <p>compared to standard residential placement</p>
Promising effects (positive or negative) limited or inconsistent evidence
<ul style="list-style-type: none"> 'Teen Courts' compared to other diversion - Positive Community based family residential placements compared to standard residential placements for male juvenile offenders - Positive
Insufficient evidence
<ul style="list-style-type: none"> Secure incarceration compared to community sentence Psycho-dynamic counselling compared to 'normal Court interventions' Pre-sentence diversions compared to court community sentence Multi component diversion for persistent offenders (comparison not clear) Multi-component diversion for mixed groups of offence severity (comparison not clear) Supported transition from secure incarceration to community compared to no or limited support Probation plus sports counselling compared to probation only Violence re-education programme compared to court imposed community service

evidence of reducing re-offending' category were converted to give more practical illustrations of the size of effect. This was completed only for those interventions in this category as it is argued that it is only interventions in this category which provide sufficient evidence to identify possible policy and practice implications. Interventions in this category are discussed below in more detail (see sections 4.2.2.1 and 4.2.2.2). General and specific research implications are discussed in section 4.3.

4.2.2 Implications for policy and practice

4.2.2.1 Connecting actions with consequences with personal skills training (personal skills training plus)

Some caution is required and these results should not be over interpreted. It is important to note that this synthesis was not testing a pre-specified hypothesis therefore it would need further testing to confirm. The 'Fail safe N' statistic⁴ indicates that only two studies with non statistically significant findings would be required to change the average

⁴ The 'Fail safe N' (also n=know as the file drawer) statistic is a statistical test to assess how many studies with the opposite result (positive or negative depending on the direction of effect of the pooled or averaged estimate) it would take to make a particular pooled or average effect size result change to one where 'no effect' was not excluded. The higher the file drawer number the more confident we can be in the pooled or average estimate found.

weighted effect size found in our analysis to one where that was unable to exclude a result of ‘no difference’. Also, although coherent in practical terms the interventions used in these studies are not easily matched to a single supporting theory about how to reduce re-offending. Furthermore the summary effect size estimate ($g=0.29$) is within a range that could feasibly be due to ‘error’ of one kind or another (e.g. coding error).

‘Interpersonal Skills’ and ‘Behavioural Programmes’ were identified in the systematic review by Lipsey, Wilson and Cothorn (2000) as showing ‘positive consistent’ findings. Only one of the studies here (Patrick & Marsh 2005) is included in the review of intervention studies by Aos, Miller, and Drake (2006). Confusingly it is included in the intervention category ‘court supervision’ presumably as one of the three interventions compared in this study was court supervision. However that is not the intervention being considered here.

Table 4.2: Effect sizes for ‘personal skills’ related interventions (Aos, Miller, and Drake 2006)

Category (No. studies)	Effects Size (fixed)	Effect size (random)	Effect size (adjusted)
Diversion for low risk (6)	-.453	-.510	-.288
Juvenile education programme (3)	-.194	-.438	-.286
Life skills education programme (3)	-.125	-.132	-.047
Restorative Justice (21)	-.138	-.152	-0.081

It is not easy to decide which of the categories used by Aos, Miller, and Drake (2006) this category of intervention would fall into. The results from the most likely categories are given in table 4.2. The effect sizes shown all indicate a lower average rate of recidivism in the groups of offenders who received the experimental interventions. These effect sizes are all statistically significant at the 5% level meaning that we can be confident the difference was ‘real’ and not just a chance occurrence.

It is argued that the results of this review demonstrate that the ‘personal skills training plus’ interventions reduce the risk

of re-offending in first time/ non serious offenders when compared to a standard diversion intervention comprising of warning and monitoring. The common components of the effective intervention were:

- personal skills training/ counselling which is about anger management, personal responsibility and decision making;
- some form of reparation to the community/ victim of crime;
- family involvement.

The findings by Lipsey, Wilson and Cothorn (2000) and Aos, Miller, and Drake (2006) would appear to support this interpretation. Arguably this type of intervention shares many common characteristics of interventions labelled as Cognitive Behavioural Therapy (CBT). Interventions labelled as such were excluded from this review but it may be that the findings presented here should be considered alongside those of CBT interventions when considering possible policy and practice implications.

All three studies in this category included in this review were undertaken in the USA and therefore possible differences in socio-cultural, economic and criminal justice systems will need to be taken into consideration when assessing the applicability of these results in a UK context. For example, the evidence presented in this review only supports the claim that this type of intervention is more effective than supervision and monitoring only. This may mean something different in the USA (where these studies were undertaken) to the UK.

It is difficult to fully grasp the practical significance of these findings in the absence of either reasonable cost effectiveness data or data on the performance of other alternative interventions. One of the three studies included in this group did supply cost effectiveness data but this was not considered to be a high quality economic analysis by the reviewers.

4.2.2.2 Community family residential placement for female offenders

Some caution is required and these results should not be over interpreted. It is important to note that this synthesis was not testing a pre-specified hypothesis therefore it would need further testing to confirm. The 'Fail safe N' statistic indicates that only one study would be required to change the average weighted effect size found in our analysis to one where that was unable to exclude a result of 'no difference'. Furthermore the summary effect size estimate ($g=0.36$) is within a range that could feasibly be due to 'error' of one kind or another (e.g. coding error). A more practical interpretation of this effect size would mean that the risk of re-offending in the group that received a community family residential placement was lower than approximately 64% of the comparison group that received 'standard community residential placement' (Coe 2000).

'Teaching family homes' were identified as having 'Positive consistent' evidence and 'Community Residential' as having 'Positive less consistent' evidence in the systematic review by Lipsey, Wilson and Cothorn L (2000). However it is not clear exactly how the interventions labelled as such match with the interventions identified in this review. The Multi-dimensional Treatment Foster Care (MTFC) studies included in this review were included in the meta-analysis by Aos, Miller, and Drake (2006) but only a single overall effect size was computed and this also indicated that MTFC reduced re-offending. A meta analytic review of 12 previous meta-analysis of 'residential treatment' computed an overall effect size of $d= 0.19$ (95%CI -0.08 to 0.03) (Grietens & Hellinck 2004). However as all types of residential treatment were lumped together in the meta-analysis it is not clear how their analysis relates this review.

It is argued that the results of this review demonstrate that 'community based family residential placements' reduce the risk of re-offending in female offenders compared to standard 'residential placements'. The findings by Lipsey, Wilson and Cothorn L (2000) and Aos, Miller, and Drake (2006) would appear to support this interpretation. The common components of the effective intervention were:

- placement for six months to a year in supportive 'family type' environment.
- personal skills training/ counselling which is about anger management, personal responsibility and decision making.
- Monitoring and use of appropriate incentives and sanctions.

Both studies included in this group were undertaken in the USA and therefore possible differences in socio-cultural, economic and criminal justice systems and their likely impact on outcomes will need careful assessment in a UK context. For example the evidence in this review only supports a claim that this intervention is more effective than 'standard community placement'. This may mean something different in the USA (where these studies were undertaken) to the UK.

However it is difficult to fully grasp the practical significance of these findings in the absence of either reasonable cost effectiveness data or data on the performance of other alternative interventions.

There is an economic analysis of the Oregon MTFC programme presented in one paper published about the programme (Chamberlain & Smith 2005 included in the review as a linked paper). However this refers to an analysis carried out as part of another meta-analysis by Aos et al. (1999) not the original data or findings which we have been unable to identify.

4.3 Implications for research

4.3.1 Overview

Because of the selective nature of the interventions included in this review it is difficult to draw any conclusions related to the research literature on the prevention of juvenile re-offending generally. Discussion will therefore be confined to those interventions identified in this review as either showing 'Consistent evidence of reducing re-offending' or 'potential promising findings'. It is argued that interventions in these categories can be used to identify research priorities. Studies in these categories should be priorities for

further primary and secondary research to gain more and better quality evidence of the impact of these interventions in different contexts. This evidence can then be used to generate more definitive evidence about the effectiveness of these interventions on different offender groups in a UK context.

Whilst interventions in the ‘consistent positive findings’ category have been highlighted as having the most potential for policy or practice we have also highlighted the need for caution in interpreting these findings. Interventions in this category will need to be the subject of further rigorous evaluations in other settings in order to confirm the potential benefit identified in this review.

4.3.2 Community based family residential placements compared to standard residential placements for male juvenile offenders

The one medium quality study in this category showed a positive effect that was statistically significant (i.e. reduced re-offending) whereas the lower quality found a negative non-statistically significant effect (i.e. increased re-offending). The higher quality study was the Oregon MTFC intervention which also showed a positive effect amongst female juvenile offenders. The lower quality study was the group family home which showed positive effects for female juvenile offenders in contrast to the negative for male. It has been suggested that ‘family placement may work different for male and female juvenile offenders with male offenders requiring the something nearer to the one to one ratio provide in the MTFC to achieve a beneficial effect. However this will require further investigation.

4.3.3 ‘Teen Courts’ compared to other diversion (promising positive effects inconsistent evidence)

One of the studies in this category was of medium quality and a weighted summary effect size was calculated which even using the more conservative random effects model found a positive effect size with confidence

intervals that excluded ‘no harm’. However, the level of statistical heterogeneity at $I^2 = 83\%$ is considered very high raising concerns about the validity of the pooled estimate. Furthermore the summary effect size computed for ‘Teen Courts’ by Aos, Miller, and Drake (2006) was negative i.e. against the Teen Courts. The evidence does suggest that ‘Teen Courts’ should be a priority for further rigorous evaluation particularly outside the USA, in order to confirm or refute their value in the reduction of re-offending.

4.3.4 General implication for research

The results from this review need to be compared to those from other systematic reviews on the same topic (i.e. interventions to reduce juvenile re-offending). The paucity of studies using high quality randomised experimental designs suggests that commissioners/funders of evaluations in the field of juvenile justice should consider the need for more studies of this type when commissioning future research.

Researchers need to improve the reporting of primary studies in two specific respects. Firstly, there needs to be full reporting of all relevant data on findings, including such basic things as standard deviations (in those instances in which means are measured and reported). Second, full reporting of the nature of both the experimental intervention and the control intervention are needed so that it is clear what is being compared to what in any evaluation. This should include description of the underlying mechanism of change in both experimental and control conditions. These simple steps would increase the policy relevance of studies enormously.

More specifically for the Home Office, the construction of the Home Office Quality Assessment tool needs further attention. At present, all of the items in the tool (10) receive equal weighting. For example, length of follow-up is given equal weighting to control for bias. This seems incorrect. A study with good control for bias is useful no matter at what point the outcome is measured. However, all things being equal, a study with a longer follow-up period is no better if there

is a potential for bias due to non-equivalent intervention and control groups.

The interpretation framework used by the Maryland Scientific Methods Scale would also benefit from further consideration. Specifically the category ‘what works’ requires that two or more studies scoring three or above on the scale are needed to provide evidence that an interventions ‘works’.

This could feasibly mean that an intervention where the evidence consisted of two studies in which there were unmatched comparison groups (SMS score three) was judged to ‘work’ (if that is what the results indicated) whilst an intervention where the evidence consisted of one large multi-centre randomised controlled trial (SMS score five) could not get into this category although arguably it would provide much higher quality evidence.

CHAPTER FIVE

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5.1 Studies included in review

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Appendix 1.1: Authorship of this report

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Appendix 2.1: Exclusion criteria

- Not published in English
- Published before 1998
- Did not report an evaluation of an intervention
- Subjects were not offenders or in the care of the Criminal Justice System
- Participants were aged 18 years or over. When studies contained overlapping samples (e.g., 13-20 years) these were considered for inclusion.
- Was a review or over-view article
- Contained no measure of recidivism
- Must not have been the subject of a recent or current systematic review
 - ‘Scared Straight’
 - ‘Boot Camps’ or related interventions
 - focused on the family of the offender
 - non-custodial employment programme
 - cognitive behavioural therapy
 - an intervention targeted at gang members or reducing gang related violence
 - intervention aimed to improve the organization and management of the Criminal Justice system
 - a restorative justice intervention
- Intervention targeted dealing with offenders drug or alcohol problems only
- Intervention targeted specific health problems only
- Intervention that specifically targeted sex offenders
- Intervention that specifically aimed to change sentencing practices or legal representation for offenders
- Study design did not include a control group. (Scores 1 or 2 on the Maryland Scientific Methods Scale)

Appendix 2.2: Search strategy

i) Bibliographic databases

ERIC, ASSIA, Social Services Abstracts, Sociological abstracts, IBSS, PAIS International, CJA, NCJRS. Sage Criminology, Cochrane, PsychInfo.

Search Terms

i) CSA databases - includes ERIC, ASSIA, Social Services Abstracts, Sociological abstracts, PAIS International, CJA, NCJRS. Sage Criminology

Query: (((KW=adolescen* or juvenile* or youth* or teenage* or youngster* or young people or young person or young persons or minor*) and (KW=secure within 2 (placement or accommodation or facilit* or care or unit* or centre* or center* or home*))) or (KW=young offender*) or (KW=high dependency unit*)) or (KW=((kid or kids or boy or boys or girl or girls or child or children) within 3 (criminal* or crime* or penal or justice or probation or parole* or conviction* or reconviction* or incarcerat* or judicial* or correction* or adjudicate*))) or (KW=((adolescen* or juvenile* or youth* or teenage* or youngster*) within 3 (criminal* or crime* or penal or justice or custody or custodi* or probation or parole* or conviction* or reconviction* or incarceration* or judicial* or correction* or adjudicate*))) or (KW=((young people or young person or young persons or minor*) within 3 (criminal* or crime* or penal or justice or custody or custodi* or probation or parole* or conviction* or reconviction* or incarceration* or judicial* or correction* or adjudicate*))) or (KW=((kid or kids or boy or boys or girl or girls or child or children) within 3 (offend* or offence* or reoffend* or reoffence* or recidivi* or delinquen*))) or (kw=((adolescen* or juvenile* or youth* or teenage* or youngster*) within 3 (offend* or offence* or reoffend* or reoffence* or recidivi* or delinquen*))) or (KW=((young people or young person or young persons or minor*) within 3 (offend* or offence* or reoffend* or reoffence* or recidivi* or delinquen*))) or (KW=((kid or kids or boy or boys or girl or girls or child or children) within 3 (prison* or jail* or gaol* or reformator*))) or (KW=((adolescen* or juvenile* or youth* or teenage* or youngster*) within 3 (prison* or jail* or gaol* or reformator*))) or (KW=((young people or young person or young persons or minor*) within 3 (prison* or jail* or gaol* or reformator*))) or (KW=((young people or young person or young persons or minor*) within 3 (prison* or jail* or gaol* or reformator*)))) or (KW=(kid or kids or boy or boys or girl or girls or child or children or young people or young person or young persons or minor* or adolescen* or juvenile*

or youth* or teenage* or youngster*) within 3 (antisocial behaviour* or anti social behaviour* or antisocial behavior* or anti social behavior*)

PsycINFO Search Strategy:

- 1 (adolescen\$ or juvenile\$ or youth\$ or teenage\$ or youngster\$).ab,ti. (104276)
- 2 (young people or young person or young persons or minor\$).ab,ti. (28323)
- 3 1 or 2 (126472)
- 4 Prisoners/ (4211)
- 5 exp Criminals/ (8132)
- 6 Prisons/ (1831)
- 7 4 or 5 or 6 (12111)
- 8 3 and 7 (1196)
- 9 (secure adj2 (placement or accommodation or facilit\$ or care or unit\$ or centre\$ or center\$ or home\$)).ab,ti. (411)
- 10 high dependency unit\$.ab,ti. (4)
- 11 9 or 10 (415)
- 12 3 and 11 (117)
- 13 exp Juvenile Delinquency/ (7694)
- 14 young offender\$.ab,ti. (547)
- 15 ((kid or kids or boy or boys or girl or girls or child or children) adj3 (criminal\$ or crime\$ or penal or justice or probation or parole\$ or conviction\$ or reconviction\$ or incarcerat\$ or judicial\$ or correction\$ or adjudicate\$)).ab,ti. (756)
- 16 ((adolescen\$ or juvenile\$ or youth\$ or teenage\$ or youngster\$) adj3 (criminal\$ or crime\$ or penal or justice or custody or custodi\$ or probation or parole\$ or conviction\$ or reconviction\$ or incarcerat\$ or judicial\$ or correction\$ or adjudicate\$)).ab,ti. (2840)
- 17 ((young people or young person or young persons or minor\$) adj3 (criminal\$ or crime\$ or penal or justice or custody or custodi\$ or probation or parole\$ or conviction\$ or reconviction\$ or incarcerat\$ or judicial\$ or correction\$ or adjudicate\$)).ab,ti. (215)
- 18 ((kid or kids or boy or boys or girl or girls or child or children) adj3 (offend\$ or offence\$ or reoffend\$ or reoffence\$ or recidivi\$ or delinquent\$)).ab,ti. (943)
- 19 ((adolescen\$ or juvenile\$ or youth\$ or teenage\$ or youngster\$) adj3 (offend\$ or offence\$ or reoffend\$ or reoffence\$ or recidivi\$ or delinquent\$)).ab,ti. (4496)
- 20 ((young people or young person or young persons or minor\$) adj3 (offend\$ or offence\$ or reoffend\$ or reoffence\$ or recidivi\$ or delinquent\$)).ab,ti. (207)
- 21 ((kid or kids or boy or boys or girl or girls or child or children) adj3 (prison\$ or jail\$ or gaol\$ or reformator\$)).ab,ti. (68)
- 22 ((adolescen\$ or juvenile\$ or youth\$ or teenage\$ or youngster\$) adj3 (prison\$ or jail\$ or gaol\$ or reformator\$)).ab,ti. (117)
- 23 ((young people or young person or young persons or minor\$) adj3 (prison\$ or jail\$ or gaol\$ or reformator\$)).ab,ti. (19)
- 24 Antisocial Behavior/ (3952)
- 25 ((antisocial or anti social) adj (behavior\$ or behaviour\$)).ab,ti. (3274)

- 26 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 (15503)
 27 8 or 26 (15853)
 28 limit 27 to (english language and yr="1998 - 2007") (8477)
 29 limit 28 to 200 adolescence <age 13 to 17 yrs> (4618)
 30 (prison\$ or incarcerat\$ or jail\$ or parole\$ or caution\$ or diver\$ or sentenc\$ or therap\$ or treatment\$ or famil\$ or juvenile court\$ or custod\$ or probation\$ or penitentiar\$).ab,ti. (443745)
 31 limit 30 to (english language and yr="1998 - 2007") (228577)
 32 29 and 31 (2625)
 33 from 32 keep 1-10 (10)
 34 from 32 keep 1-2625 (2625)

Cochrane Database search terms

"kid or boy or girl or child or adolescen* or juvenile or youth or teenage* or youngster or young people or young person or minor in Title, Abstract or Keywords and crim* or probation or parole* or incarcerat* or delinquen* or prison* or jail* or gaol* or reformat* or caution or diversion or sentenc* or therap* or treatment or family or juvenile court or juvenile crime or detention or custod* or penitentiar* or anti social or antisocial or correction* or adjudicat* in Title, Abstract or Keywords and penal or justice or conviction or reconviction or incarcerat* or judicial or offen* or reoffen* or court order or recidivi* in Title, Abstract or Keywords, from 1998 to 2007"

ii) Experts contacted

Professor David Farrington	University of Cambridge
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Dr Roxanne Lieb	Washington State Inst. for Public Policy
Dr Anthony Petrosino	WestEd
Professor Rolf Loeber	University of Pittsburg
Dr Vicente Garrido	University of Valencia
Professor Friedrich Losel	University of Cambridge
Professor Christoph Martin Killias	University of Lausanne
Professor Richard Dembo	University of South Florida
Professor James McGuire	University of Liverpool

iii) Websites searched

Rand corporation (US)
National Institutes of Justice (US)
Home Office (UK)
Dept for Education and Skills (UK)
Youth Justice Board (UK)

Search also undertaken using Google Scholar

iv) Citation search papers

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Appendix 2.3: Coding sheet

Section A: Administrative details

Use of these guidelines should be cited as: EPPI-Centre (2007) Review Guidelines for Extracting Data and Quality Assessing Primary Studies for Home Office Offender reviews. Version 1.0 London: EPPI-Centre, Social Science Research Unit.

A.1 Name of the reviewer	A.1.1 Details
A.2 Date of the review	A.2.1 Details
A.3 Please enter the details of each paper which reports on this item/study and which is used to complete this data extraction. (1): A paper can be a journal article, a book, or chapter in a book, or an unpublished report.	A.3.1 Paper (1) Fill in a separate entry for further papers as required. A.3.2 Unique Identifier: A.3.3 Authors: A.3.4 Title: A.3.5 Paper (2) A.3.6 Unique Identifier: A.3.7 Authors: A.3.8 Title:
A.4 Main paper. Please classify one of the above papers as the 'main' report of the study and enter its unique identifier here. NB(1): When only one paper reports on the study, this will be the 'main' report. NB(2): In some cases the 'main' paper will be the one which provides the fullest or the latest report of the study. In other cases the decision about which is the 'main' report will have to be made on an arbitrary basis.	A.4.1 Unique Identifier:

<p>A.5 Please enter the details of each paper which reports on this study but is NOT being used to complete this data extraction.</p> <p>NB A paper can be a journal article, a book, or chapter in a book, or an unpublished report.</p>	<p>A.5.1 Paper (1) Fill in a separate entry for further papers as required.</p> <p>A.5.2 Unique Identifier:</p> <p>A.5.3 Authors:</p> <p>A.5.4 Title:</p> <p>A.5.5 Paper (2)</p> <p>A.5.6 Unique Identifier:</p> <p>A.5.7 Authors:</p> <p>A.5.8 Title:</p>
<p>A.6 If the study has a broad focus and this data extraction focuses on just one component of the study, please specify this here.</p>	<p>A.6.1 Not applicable (whole study is focus of data extraction)</p> <p>A.6.2 Specific focus of this data extraction (please specify)</p>
<p>A.7 Identification of report (or reports)</p> <p>Please use AS MANY KEYWORDS AS APPLY.</p>	<p>A.7.1 Citation Please use this keyword if the report was identified from the bibliographic list of another report.</p> <p>A.7.2 Contact Please use this keyword if the report was found through a personal/professional contact.</p> <p>A.7.3 Handsearch Please use this keyword if the report was found through handsearching a journal.</p> <p>A.7.4 Unknown Please use this keyword if it is unknown how the report was found.</p> <p>A.7.5 Electronic database Please use this keyword if the report was found through searching on an electronic bibliographic database.</p>
<p>A.8 Status</p> <p>Please use ONE keyword only</p>	<p>A.8.1 Published Please use this keyword if the report has an ISBN or ISSN number.</p> <p>A.8.2 Published as a report or conference paper Please use this code for reports which do not have an ISBN or ISSN number (eg. 'internal' reports; conference papers)</p> <p>A.8.3 Unpublished e.g. thesis or author manuscript</p>
<p>A.9 Language (please specify)</p>	<p>A.9.1 Details of Language of report Please use as many keywords that apply</p>

Section B: Study Aims and Rationale

B.1 What are the broad aims of the study?	B.1.1 Explicitly stated (please specify) B.1.2 Implicit (please specify) B.1.3 Not stated/unclear (please specify)
B.2 What is the purpose of the study ?	B.2.1 A: Description B.2.2 B: Exploration of relationships B.2.3 C: What works? B.2.4 D: Methods development B.2.5 E: Reviewing/synthesising research
B.3 Do authors report how the study was funded?	B.3.1 Explicitly stated (please specify) B.3.2 Implicit (please specify) B.3.3 Not stated/unclear (please specify)
B.4 When was the study carried out?	B.4.1 Explicitly stated (please specify) B.4.2 Implicit (please specify) B.4.3 Not stated/unclear (please specify)
B.5 What are the study research questions and/or hypotheses?.	B.5.1 Explicitly stated (please specify) B.5.2 Implicit (please specify) B.5.3 Not stated/ unclear (please specify)

Section C: Actual sample

If there are several samples or levels of sample, please complete for each level

C.1 Nature of offending by sample	C.1.1 Violence against the person Includes: murder, attempted murder, manslaughter, wounding, assault etc C.1.2 Sexual Offences Includes: buggery, indecent assault, rape, incest, bigamy C.1.3 Burglary Includes burglary in a dwelling C.1.4 Robbery Includes: robbery and attempts to assault C.1.5 Theft and Handling Theft and handling of stolen goods C.1.6 Fraud or forgery Includes: false pretences, bankruptcy C.1.7 Criminal damage Includes arson, other criminal damage C.1.8 Drug Offences Misuse of drugs C.1.9 other dishonesty Excludes motoring offences C.1.10 Indictable motoring offences C.1.11 mixed offences C.1.12 Other offence C.1.13 Not stated
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C.2 Number of participants in the study (the actual sample) if more than one group is being compared, please give numbers for each group	C.2.1 Not applicable (e.g study of policies, documents etc) C.2.2 Explicitly stated (please specify) C.2.3 Implicit (please specify) C.2.4 Not stated/ unclear (please specify)
C.3 What ages are covered by the actual sample	C.3.1 Under 15 (please specify) C.3.2 15 and over (please specify) C.3.3 Not stated/ unclear (please specify)
C.4 Adult offenders - Age	C.4.1 Explicit (please specify) C.4.2 Implicit (please specify) C.4.3 not /reported / unclear
C.5 Sex of participants Please give the numbers of the sample that fall within each of the given categories. If necessary refer to a page number in the report (e.g. for a useful table). If more than one group is being compared, please describe for each group.	C.5.1 Not applicable (e.g. study of policies, documents etc) C.5.2 Single sex (please specify) C.5.3 Mixed sex (please specify) C.5.4 Not stated/unclear (please specify)
C.6 What is the socio-economic status of the individuals within the actual sample If more than one group is being compared, please describe for each group.	C.6.1 Not applicable (e.g. study of policies, documents etc) C.6.2 Explicitly stated (please specify) C.6.3 Implicit (please specify) C.6.4 Not stated/unclear (please specify)
C.7 Ethnicity of the individuals within the actual sample If more than one group is being compared, please describe for each group.	C.7.1 Not applicable (e.g. study of policies, documents etc) C.7.2 Explicitly stated (please specify) C.7.3 Implicit (please specify) C.7.4 Not stated/unclear (please specify)
C.8 What is known about the special educational needs of individuals within the actual sample e.g. specific learning, physical, emotional, behavioural, intellectual difficulties.	C.8.1 Not applicable (e.g. study of policies, documents etc) C.8.2 Explicitly stated (please specify) C.8.3 Implicit (please specify) C.8.4 Not stated/unclear (please specify)
C.9 Number of offences committed by participants in sample	C.9.1 <6 in 12 month period C.9.2 6-9 in 12 month period C.9.3 10 + in 12 month period C.9.4 Other (please specify) C.9.5 Not clear/ unspecified

C.10 Definition of 'persistent' offender used May link to question C9 depending on how reported in study	C.10.1 Please specify C.10.2 Not stated / unclear
C.11 Please specify any other useful information about the study participants.	C.11.1 Details

Section D: Programme or Intervention description

D.1 Country where intervention carried out	D.1.1 Non UK Europe D.1.2 Australia D.1.3 Canada D.1.4 United Kingdom Please state which Country (England, Scotland, Northern Ireland, Wales) D.1.5 United States of America D.1.6 Other (please State) D.1.7 Unclear/ Not stated
D.2 Location of intervention	D.2.1 Correctional Institution Please use if the study takes place in a correctional institution e.g. Young Offender Institution D.2.2 Community Use this code for interventions that are undertaken in the community and are not initiated from within the criminal justice processing system D.2.3 Criminal Justice processing system Use this code for interventions that take place or are initiated from within the criminal justice processing system e.g. the court system D.2.4 Unstated /not clear
D.3 Target group of intervention	D.3.1 Low risk D.3.2 medium risk D.3.3 High risk D.3.4 Sexual offender D.3.5 violent offender D.3.6 substance user intervention is specifically for substance user regardless of offence D.3.7 mentally disordered offender D.3.8 other (please specify) D.3.9 not specified/unclear

D.4 Timing of intervention	<p>D.4.1 Pre-sentencing Use this code where intervention is carried out prior to offender receiving any sentence from the court</p> <p>D.4.2 Post-sentencing Use this code where the intervention is carried out after an offender has been sentenced and/or is part of the sentence</p> <p>D.4.3 Not stated/unclear</p>
D.5 Post sentencing intervention location Question refers to post-sentencing interventions only	<p>D.5.1 N/A Not post sentencing intervention</p> <p>D.5.2 Community (please specify)</p> <p>D.5.3 Institution (please specify)</p> <p>D.5.4 Not stated/ unclear</p> <p>D.5.5 error</p>
D.6 If a programme or intervention is being studied, does it have a formal name? D.7 Main category of intervention Categories are mutually exclusive. For each intervention please code one category only. Where is multi-component please select this code only.	<p>D.6.1 Not applicable (no programme or intervention)</p> <p>D.6.2 Not stated/ unclear (please specify)</p> <p>D.6.3 Yes (please specify)</p> <p>D.6.4 No (please specify)</p>
D.7 Main category of intervention Categories are mutually exclusive. For each intervention please code one category only. Where is multi-component please select this code only.	<p>D.7.1 Diversion Use where intervention is an activity designed to turn offenders away from crime e.g recreational activities</p> <p>D.7.2 Pre-court diversion schemes delivered by CJS Use where intervention occurs prior to court appearance and is provided by agency within the criminal justice system</p> <p>D.7.3 Opportunities provision Use where intervention is focused on providing new long term opportunities for offenders e.g. housing, employment</p> <p>D.7.4 Community mobilization Use where intervention focuses on the engagement and mobilization of communities to reduce offending</p> <p>D.7.5 Probation Use where intervention is to be given a probation order as a sentence</p> <p>D.7.6 Legal Use this code where intervention = changes in law and/or legal procedure e.g effective sentencing guidelines</p> <p>D.7.7 Enforcement Use this code for interventions that enforce sanctions e.g. Curfews, restraint or control orders, tagging</p>

	<p>D.7.8 Interventions to deal with specific health problems e.g. mental health</p> <p>D.7.9 Drug/alcohol treatment programmes</p> <p>D.7.10 Anger / aggression management programmes or similar</p> <p>D.7.11 Counselling (any)</p> <p>Not Cognitive Behavioral Treatment programmes (should be excluded from review)</p> <p>D.7.12 Organization and management use where the intervention is change in organization and management of services provided to offenders e.g. reduction caseload or introduction of case management approaches</p> <p>D.7.13 Educational/ vocational training Use for any intervention that focuses on developing general educational level or specific skills of participants including mentoring programmes</p> <p>D.7.14 Restorative Justice Use where focus of intervention is bringing victim and offender together so that offender is made to confront what they have done</p> <p>D.7.15 Multi-component/ Comprehensive Use where interventions adopts a number of the elements outlined above (please also tick the individual elements)</p> <p>D.7.16 Other (please state)</p> <p>D.7.17 Not stated/ Unclear</p>
D.8 Type of intervention	<p>D.8.2 Opportunities provision Use where intervention is focused on providing new long term opportunities for offenders e.g. housing, employment</p> <p>D.8.3 Community mobilization Use where intervention focuses on the engagement and mobilization of communities to reduce offending</p> <p>D.8.4 Diversion Use where intervention is an activity designed to turn offenders away from crime e.g recreational activities</p> <p>D.8.5 Probation Use where intervention is to be given a probation order as a sentence</p> <p>D.8.6 Legal Use this codes where intervention = changes in law and/or legal procedure e.g effective sentencing guidelines</p> <p>D.8.7 Enforcement Use this code for interventions that enforce sanctions e.g. Curfews, restraint or control orders, tagging</p> <p>D.8.8 Interventions to deal with specific health problems e.g. mental health</p> <p>D.8.9 Drug/alcohol treatment programmes</p> <p>D.8.10 Anger/ aggression management programmes or similar</p>

	<p>D.8.11 Counselling (any) Not Cognitive Behavioral Treatment programmes (should be excluded from review)</p> <p>D.8.12 Organization and management use where the intervention is change in organization and management of services provided to offenders e.g. reduction caseload or introduction of case management approaches</p> <p>D.8.13 Educational/ vocational training Use for any intervention that focuses on developing general educational level or specific skills of participants including mentoring programmes</p> <p>D.8.14 Restorative Justice Use where focus of intervention is bringing victim and offender together so that offender is made to confront what they have done</p> <p>D.8.15 Multi-component/ Comprehensive Use where interventions adopts a number of the elements outlined above (please also tick the individual elements)</p> <p>D.8.16 Other (please state)</p> <p>D.8.17 Unclear</p> <p>D.8.18 Not stated</p>
D.9 Theory of change Describe the intervention in detail, whenever possible copying the authors' description from the report word for word. If specified in the report, also describe in detail what the control/ comparison group(s) were exposed to.	D.9.1 Details
D.10 Aim(s) of the intervention	<p>D.10.1 Not stated</p> <p>D.10.2 Not explicitly stated (Write in, as worded by the reviewer)</p> <p>D.10.3 Stated (Write in, as stated by the authors)</p>
D.11 What is the theory or mechanism of change (intervention) A theory or mechanism of change is an explanation of how the intervention would or should achieve the desired outcome (change). This may be made explicit by the author or should be deduced by the reviewer.	<p>D.11.1 Explicit (please specify) Use if the mechanism/model is given or explained by the author</p> <p>D.11.2 Implicit (please specify) Use where the mechanism is deduced by the reviewer</p>

D.12 Year intervention started Where relevant	D.12.1 Details
D.13 Duration of the intervention Choose the relevant category and write in the exact intervention length if specified in the report When the intervention is ongoing, tick 'OTHER' and indicate the length of intervention as the length of the outcome assessment period	D.13.1 Not stated D.13.2 Not applicable D.13.3 Unclear D.13.4 One day or less (please specify) D.13.5 1 day to 1 week (please specify) D.13.6 1 week (and 1 day) to 1 month (please specify) D.13.7 1 month (and 1 day) to 3 months (please specify) D.13.8 3 months (and 1 day) to 6 months (please specify) D.13.9 6 months (and 1 day) to 1 year (please specify) D.13.10 1 year (and 1 day) to 2 years (please specify) D.13.11 2 years (and 1 day) to 3 years (please specify) D.13.12 3 years (and 1 day) to 5 years (please specify) D.13.13 more than 5 years (please specify) D.13.14 Other (please specify)
D.14 Intensity of the Intervention	D.14.1 Daily D.14.2 1-2 per week D.14.3 2-4 per week D.14.4 less than weekly (give frequency) D.14.5 Unclear/ not stated
D.15 Person providing the intervention (tick as many as appropriate)	D.15.1 Counsellor D.15.2 Health professional (please specify) D.15.3 Parent D.15.4 Peer D.15.5 Psychologist D.15.6 Researcher D.15.7 Social worker D.15.8 Teacher/lecturer D.15.9 Probation service D.15.10 Prison staff D.15.11 Court worker D.15.12 Police Officer D.15.13 Other (specify) D.15.14 Unstated/ not clear

D.16 Was special training given to people providing the intervention? Provide as much detail as possible	D.16.1 Not stated D.16.2 Unclear D.16.3 Yes (please specify) D.16.4 No
D.17 Is evidence of fidelity of the intervention provided Any evidence provided by authors that intervention was delivered as intended	D.17.1 Yes (please specify) D.17.2 Not stated/ Unclear
D.18 Treatment/ intervention of the control/ comparison group	D.18.1 No control group Use this code if participants acted as own control e.g. in pre-post test design D.18.2 treatment as usual (please specify) D.18.3 alternative intervention (please specify) D.18.4 Not stated/ unclear
D.19 What is the theory or mechanism of change (control) A theory or mechanism of change is an explanation of how the control would or should achieve the desired outcome (change). This may be made explicit by the author or should be deduced by the reviewer	D.19.1 Explicit (please specify) Use where mechanism is given by author D.19.2 Implicit (please specify) Use where mechanism is deduced by reviewer

Section E: Results & Conclusions

E.1 What is the outcome measure Tick all that apply	E.1.1 Measure of recidivism i.e. a measure of criminal behaviour by offender E.1.2 Other related measure E.1.3 Not stated/ Unclear
E.2 Measure of recidivism used	E.2.1 N/A No measure of recidivism E.2.2 Self-reported (by offender) E.2.3 Arrest E.2.4 Court appearance E.2.5 Guilty sentence (Adjudication) E.2.6 Report of CJS staff E.2.7 Breach or failure to comply with conditions of sentence e.g fails to comply with parole conditions E.2.8 Other (please specify) E.2.9 Not stated/ Unclear

E.3 Length of follow-up to outcome Please give for each different outcome	E.3.1 24 Months + (please specify) E.3.2 12-24 Months (please specify) E.3.3 Under 12 months (please specify) E.3.4 Not reported unclear
E.4 Results of the study as reported by authors? Please give as much detail as possible and refer to page numbers in the report(s) of the study, where necessary (e.g. for key tables). Please use facility for extracting data/ outcomes where appropriate	E.4.1 Details
E.5 Where economic analysis completed what are the results Please give all relevant data All data relating to costs All data relating to benefits For studies where costs and benefits compared between two alternatives please report all costs and benefits for both alternatives	E.5.1 N/A No economic analysis E.5.2 Details
E.6 For cost benefit analysis financial costs are lower in	E.6.1 N/A No economic analysis E.6.2 The experimental or intervention group E.6.3 The control group
E.7 For cost benefit analysis benefits are lower or harm greater in	E.7.1 N/A No economic analysis E.7.2 The experimental (intervention) group E.7.3 The Control (or comparison group)
E.8 Are there any obvious shortcomings in the reporting of the data?	E.8.1 Yes (please specify) E.8.2 No
E.9 Do the authors report on all variables they aimed to study as specified in their aims/ research questions? This excludes variables just used to describe the sample.	E.9.1 Yes (please specify) E.9.2 No
E.10 What do the author(s) conclude about the findings of the study?	E.10.1 Details

Section F: Study Method

F.1 Study Timing Please indicate all that apply and give further details where possible	F.1.1 Cross-sectional F.1.2 Retrospective F.1.3 Prospective F.1.4 Not stated/ unclear (please specify)
F.2 when were the measurements of the variable(s) used as outcome measures made, in relation to the intervention.	F.2.1 Not applicable (not an evaluation) F.2.2 Before and after F.2.3 Only after F.2.4 Other (please specify) F.2.5 Not stated/unclear (please specify)
F.3 What is the method used in the study?	F.3.1 Random experiment with random allocation to groups F.3.2 Experiment with non-random allocation to groups F.3.3 One group pre-post test F.3.4 One group post-test only F.3.5 Cohort study F.3.6 Case-control study F.3.7 Cross-sectional study F.3.8 Views study F.3.9 Ethnography F.3.10 Systematic review F.3.11 Other review (non systematic) F.3.12 Case study F.3.13 Document study F.3.14 Action research F.3.15 Methodological study F.3.16 Secondary data analysis
	F.4.1 Level 1 A relationship between intervention and conviction outcome (intervention group with no comparison group) F.4.2 Level 2 Expected reconviction rates (or predicted rates) compared to actual reconviction rates for intervention group (risk predictor with no comparison group) F.4.3 Level 3 Comparison group present without demonstrated comparability to intervention group (unmatched comparison group) F.4.4 Level 4 Comparison group matched to intervention group on theoretically relevant factors e.g.risk of reconviction (well-matched comparison group) F.4.5 Level 5 Random assignment of offenders to the intervention and control conditions (randomised control trial)

Section G: Methods-groups

<p>G.1 If Comparisons are being made between two or more groups*, please specify the basis of any divisions made for making these comparisons</p> <p>Please give further details where possible</p> <p>*If no comparisons are being made between groups please continue to Section I (Methods - sampling strategy)</p>	<p>G.1.1 Not applicable (not more than one group)</p> <p>G.1.2 Prospective allocation into more than one group</p> <p>e.g allocation to different interventions, or allocation to intervention and control groups</p> <p>G.1.3 No prospective allocation but use of pre-existing differences to create comparison groups</p> <p>e.g. receiving different interventions or characterised by different levels of a variable such as social class</p> <p>G.1.4 Other (please specify)</p>
<p>G.2 Method of selection</p> <p>Were the experimental and control groups somehow selected differently, or were not comparable for some reason? For example, did the groups demonstrate very different patterns of offending prior to entering treatment and control groups? This score relates to the 'recruitment' phase only, i.e. before any treatment takes place or is even offered.</p>	<p>G.2.1 Control and experimental groups comparable (1)</p> <p>G.2.2 Control and experimental groups not comparable, but differences adequately controlled for statistically (2)</p> <p>G.2.3 Control and experimental groups not comparable, and differences not adequately controlled for statistically, or not controlled at all (3)</p> <p>G.2.4 Not reported (5)</p>
<p>G.3 How do the groups differ?</p>	<p>G.3.1 Not applicable (not in more than one group)</p> <p>G.3.2 Explicitly stated (please specify)</p> <p>G.3.3 Implicit (please specify)</p> <p>G.3.4 Not stated/ unclear (please specify)</p>
<p>G.4 Number of groups</p> <p>For instance, in studies in which comparisons are made between group, this may be the number of groups into which the dataset is divided for analysis (e.g social class, or form size), or the number of groups allocated to, or receiving, an intervention.</p>	<p>G.4.1 Not applicable (not more than one group)</p> <p>G.4.2 One</p> <p>G.4.3 Two</p> <p>G.4.4 Three</p> <p>G.4.5 Four or more (please specify)</p> <p>G.4.6 Other/ unclear (please specify)</p>
<p>G.5 If prospective allocation into more than one group, what was the unit of allocation?</p> <p>Please indicate all that apply and give further details where possible</p>	<p>G.5.1 Not applicable (not more than one group)</p> <p>G.5.2 Not applicable (no prospective allocation)</p> <p>G.5.3 Individuals</p> <p>G.5.4 Groupings or clusters of individuals (e.g classes or schools) please specify</p> <p>G.5.5 Other (e.g individuals or groups acting as their own controls - please specify)</p> <p>G.5.6 Not stated/ unclear (please specify)</p>

G.6 If prospective allocation into more than one group, which method was used to generate the allocation sequence?	G.6.1 Not applicable (not more than one group) G.6.2 Not applicable (no prospective allocation) G.6.3 Random G.6.4 Quasi-random G.6.5 Non-random G.6.6 Not stated/unclear (please specify)
G.7 If prospective allocation into more than one group, was the allocation sequence concealed? Bias can be introduced, consciously or otherwise, if the allocation of pupils or classes or schools to a programme or intervention is made in the knowledge of key characteristics of those allocated.	G.7.1 Not applicable (not more than one group) G.7.2 Not applicable (no prospective allocation) G.7.3 Yes (please specify) G.7.4 No (please specify) G.7.5 Not stated/unclear (please specify)
G.8 Were groups treated equally Please specify any ways in which the intervention and control groups were treated differently (apart from the intervention itself) e.g different timing of data collection	G.8.1 Not applicable groups treated equally G.8.2 Details (please specify)
G.9 Study design summary	G.9.1 Details

Section H: Methods - Sampling strategy

H.1 What is the sampling frame (if any) from which the participants are chosen? e.g. telephone directory, electoral register, postcode, school listings etc.	H.1.1 Not applicable (please specify) H.1.2 Explicitly stated (please specify) H.1.3 Implicit (please specify) H.1.4 Not stated/unclear (please specify)
H.2 Which method does the study use to select people, or groups of people (from the sampling frame)?	H.2.1 Not applicable (no sampling frame) H.2.2 Explicitly stated (please specify) H.2.3 Implicit (please specify) H.2.4 Not stated/unclear (please specify)
H.3 How representative was the achieved sample (as recruited at the start of the study) in relation to the aims of the sampling frame? Please specify basis for your decision.	H.3.1 Not applicable (e.g. study of policies, documents, etc.) H.3.2 Not applicable (no sampling frame) H.3.3 High (please specify) H.3.4 Medium (please specify) H.3.5 Low (please specify) H.3.6 Unclear (please specify)

<p>H.4 For studies that involve following samples prospectively over time, do the authors provide any information on whether, and/or how, those who dropped out of the study differ from those who remained in the study?</p>	<p>H.4.1 Not applicable (e.g. study of policies, documents, etc.)</p> <p>H.4.2 Not applicable (not following samples prospectively over time)</p> <p>H.4.3 Not applicable (no drop outs)</p> <p>H.4.4 Yes (please specify)</p> <p>H.4.5 No</p>
<p>H.5 If the study involves following samples prospectively over time, do authors provide baseline values of key variables, such as those being used as outcomes, and relevant socio-demographic variables?</p>	<p>H.5.1 Not applicable (e.g. study of policies, documents, etc.)</p> <p>H.5.2 Not applicable (not following samples prospectively over time)</p> <p>H.5.3 Yes (please specify)</p> <p>H.5.4 No</p>

Section I: Methods - recruitment and consent

<p>I.1 Which methods are used to recruit people into the study? e.g. letters of invitation, telephone contact, face-to-face contact.</p>	<p>I.1.1 Not applicable (please specify) I.1.2 Explicitly stated (please specify) I.1.3 Implicit (please specify) I.1.4 Not stated/unclear (please specify) I.1.5 Please specify any other details relevant to recruitment and consent</p>
<p>I.2 Were any incentives provided to recruit people into the study?</p>	<p>I.2.1 Not applicable (please specify) I.2.2 Explicitly stated (please specify) I.2.3 Not stated/unclear (please specify)</p>
<p>I.3 Was consent sought? Please comment on the quality of consent, if relevant.</p>	<p>I.3.1 Not applicable (please specify) I.3.2 Participant consent sought I.3.3 Parental consent sought I.3.4 Other consent sought I.3.5 Consent not sought I.3.6 Not stated/unclear (please specify)</p>

Section J: Methods - Data Collection

J.1 Which methods were used to collect the data?

Please indicate all that apply and give further detail where possible

J.1.1 Criminal Justice System records

Please state e.g. court records

J.1.2 Focus group interview

J.1.3 One-to-one interview (face to face or by phone)

J.1.4 Observation

J.1.5 Self-completion questionnaire

J.1.6 self-completion report or diary

J.1.7 Examinations

J.1.8 Clinical test

J.1.9 Practical test

J.1.10 Psychological test (e.g I.Q test)

J.1.11 Hypothetical scenario including vignettes

J.1.12 Secondary data such as publicly available statistics

J.1.13 Other documentation

J.1.14 Not stated/ unclear (please specify)

J.1.15 Please specify any other important features of data collection

J.1.16 Coding is based on: Author's description

J.1.17 Coding is based on: Reviewers' interpretation

J.2 Details of data collection instruments or tool(s).

Please provide details including names for all tools used to collect data, and examples of any questions/items given.

J.2.1 Explicitly stated (please specify)

J.2.2 Implicit (please specify)

J.2.3 Not stated/ unclear (please specify)

J.3 Do the authors' describe any ways they addressed the repeatability or reliability of their data collection tools/methods?

J.3.1 Details

J.3.2 Not stated/Unclear

J.4 Do the authors describe any ways they have addressed the validity or trustworthiness of their data collection tools/methods?

J.4.1 Details

J.4.2 Not Stated/unclear

J.5 Was there a concealment of which group that subjects were assigned to (i.e. the intervention or control) or other key factors from those carrying out measurement of outcome - if relevant?

J.5.1 Not applicable (please say why)

J.5.2 Yes (please specify)

J.5.3 No (please specify)

Section K: Methods - data analysis

K.1 Is Power /Sample Size calculation given	K.1.1 Yes given (please specify) K.1.2 Author claims done but not given K.1.3 Not reported / Unclear
K.2 Which methods were used to analyse the data? Please give details of approach methods including statistical methods.	K.2.1 Explicitly stated (please specify) K.2.2 Implicit (please specify) K.2.3 Not stated/unclear (please specify) K.2.4 Please specify any important analytic or statistical issues
K.3 Did the study address multiplicity by reporting ancillary analyses, including subgroup analyses and adjusted analyses, and do the authors report on whether these were pre-specified or exploratory?	K.3.1 Yes (please specify) K.3.2 No (please specify) K.3.3 Not applicable
K.4 Do the authors describe strategies used in the analysis to control for bias from confounding variables?	K.4.1 Yes (please specify) K.4.2 No K.4.3 Not applicable
K.5 Attrition bias Were all the participants in the experimental and the control samples accounted for?	K.5.1 No/ very little (<10%) attrition (1) K.5.2 Some attrition but adequately controlled for statistically (2) K.5.3 Some attrition but not adequately controlled for statistically, or not controlled for at all (3) K.5.4 Not reported (5)
K.6 Were appropriate steps taken to establish reliability/validity of analysis e.g. assumptions for statistical analysis met triangulation in qualitative analysis	K.6.1 Not appropriate/needed K.6.2 Yes appropriate steps taken (please specify) K.6.3 No appropriate steps not taken (please specify) If you use his code please specify what you think should have been done K.6.4 No stated/ unclear

Section L: Methods - Economic Analysis

L.1 What economic analysis was completed

Cost of intervention = Where total cost or cost per unit of output only given

Cost Benefit Analysis (CBA) = All costs and all benefits of intervention are identified and weighed against each other in common units (normally £)

Cost Effectiveness Analysis (CEA) = All costs and all benefits identified in intervention and compared with other possible interventions to achieve the same goal - usually requires the same standard outcome measure for example cost per reduction in arrests

Cost Utility Analysis (CUA) = Can be either CBA or CEA but in addition outcomes are converted into measure which takes account of their quality or utility for example Quality Adjusted Life Years (QALYs)

Please use codes F.4.6 or F.4.7 to indicate whether your answer is based on author report or your interpretation

L.1.1 None

L.1.2 Cost of intervention only

L.1.3 Cost Benefit analysis

L.1.4 Cost effectiveness analysis

L.1.5 Cost Utility analysis

L.1.6 Coding is based on: Authors' description

L.1.7 Coding is based on: Reviewers' inference

L.2 Are estimates given as marginal costs/benefits

i.e. the additional cost /benefit that would be gained/ lost over and above what might usually be provided / might be the usual outcome

L.2.1 N/A No economic analysis

L.2.2 Details

L.3 What inputs and or outcomes are measured in financial terms

Please report all items that are included reporting inputs and outcomes separately

L.3.1 N/A No economic analysis

L.3.2 Details

L.4 What are the sources of data for the financial estimates

Please describe for inputs and outcomes included in the analysis

L.4.1 N/A No economic analysis

L.4.2 Details

If not given please state

L.5 How are the financial values given for inputs and outputs derived

Example of direct financial cost is budget of service per year

Example of costs where monetary value has to be estimated = cost of practitioner training

Example of benefit where monetary value has to be estimated = value to community of reduction in crime

Please describe for all relevant costs and benefits reported

Please state if not given

L.5.1 N/A No economic analysis

L.5.2 details

<p>L.6 What adjustments are made for differential timing in realization of costs and benefits</p> <p>If none, Not applicable or not given please state</p> <p>Data should be given as constant values adjusted to the same year for costs and benefits</p> <p>Example 1: Service costs may be expressed as cost of service based on its expenditure during operation. Benefits may be expressed financial savings that would accrue from e.g. reduction in crime. However the savings from reduction in crime will occur at a future point in time and adjustments should be made for this.</p> <p>Example 2: Data on costs and/or benefits maybe based on projections which are derived from previous similar exercises for example projected annual earnings. Data maybe adjusted to take into account changes in average earnings over the period of time between the source data and the study</p>	<p>L.6.1 N/A No economic analysis</p> <p>L.6.2 details</p>
<p>L.7 What sensitivity analysis was undertaken to estimate the effect of uncertainty in costs of inputs/outcomes</p> <p>Where costs or benefits are based on estimates sensitivity analysis maybe undertaken to test the effect on the results that changing some of the parameters of the estimates makes.</p> <p>Where costs or benefits are based on a client outcome the outcome will be a point estimate which should have a confidence interval the economic analysis should reflect this</p>	<p>L.7.1 N/A No economic analysis</p> <p>L.7.2 Details</p>

Section M: Home Office Quality Assessment Tool

M.1 Sample size and power See question K1	M.1.1 Sample is sufficient to detect the estimated effect size at 80% power (1) Please state the effect size estimate. M.1.2 Sample is not sufficient to detect the estimated effect size at 80% power (3) Please state the effect size estimate. M.1.3 Not reported (5)
M.2 Method of study See question H2	M.2.1 Whole population or random samples (1) M.2.2 Purposive samples with potential impact adequately controlled for statistically (2) M.2.3 Purposive samples with potential impact not adequately controlled for statistically, or not controlled for at all (3) M.2.4 Not reported (5)
M.3 Method of selection (Question G2) This question is the same as question G2	M.3.1 Control & experimental groups comparable (1) M.3.2 Control and experimental groups not comparable but differences adequately controlled for statistically (2) M.3.3 Groups not comparable and differences not adequately controlled for statistically (3) M.3.4 Not reported (5)
M.4 Response / refusal bias How many people were approached to participate in the study is this the same as the number who were entered into the study This can be thought of as attrition before the study commences. see answers to questions K5 H4 & H5	M.4.1 No bias (1) M.4.2 Some bias but adequately controlled for statistically (2) M.4.3 Some bias and not adequately controlled for statistically, or not controlled for at all (3) M.4.4 Not reported (5)
M.5 Attrition Bias (question K5) If attrition can be deduced from numbers in the study do not use 'Not reported' This is the same question as question K5 please give the same answer	M.5.1 <10% attrition (1) M.5.2 Some attrition but adequately controlled for statistically (2) M.5.3 Some attrition but not controlled for statistically (3) M.5.4 Not reported (5)

<p>M.6 Performance bias</p> <p>Were experimental and control group dealt with separately other than the intervention itself e.g. was the data collection measures the same</p> <p>If appropriate were those measuring outcomes blind to the allocation status of the participants i.e. which group they were in.</p> <p>See Question J5</p>	<p>M.6.1 Groups treated equally & observers blinded (or not relevant) 1 Blinding is not relevant where outcome is based on official statistics e.g police records</p> <p>M.6.2 Differences in way group treated and/or no blinding - minor effect 2</p> <p>M.6.3 Differences in way groups treated and/or no blinding -major effects (3)</p> <p>M.6.4 Not reported (5)</p>
<p>M.7 Data collection Method</p> <p>Studies that rely on the retrospective collection of self-reported pre- and post-intervention data only should be given a maximum score of 2 (given likely recall issues). Studies relying on a single data collection method should be given a maximum score of 2.</p> <p>See question J1 & J2</p>	<p>M.7.1 Very appropriate (1)</p> <p>M.7.2 Appropriate (2)</p> <p>M.7.3 Not appropriate (3)</p> <p>M.7.4 Not reported (5)</p>
<p>M.8 Outcome measurement timing</p> <p>24+ month follow-ups should be rated as 1,</p> <p>12-24 month follow-ups should be rated as 2 and under-12 month follow-ups should be rated as 3.</p> <p>Those studies where no baseline data are collected should be marked as 3</p> <p>See question E3</p>	<p>M.8.1 Very appropriate (1)</p> <p>M.8.2 Appropriate (2)</p> <p>M.8.3 Not appropriate (3)</p> <p>M.8.4 Not reported (5)</p>
<p>M.9 Validation of outcome measures</p> <p>If appropriate, were different sources of data used? Was any triangulation carried out? For example, was self-reported criminality matched to official records?</p> <p>Studies relying on a single data source should be given a maximum score of 2. Studies that rely on a single measure of recidivism should be given a maximum score of 2.</p> <p>Data collection - general</p> <p>Where multiple methods are used, the reviewer must make a judgment regarding the overall standard of the data collection, concentrating on those data deemed most appropriate to answering the research questions.</p> <p>See question J1</p>	<p>M.9.1 Very appropriate (1)</p> <p>M.9.2 Appropriate (2)</p> <p>M.9.3 Not appropriate (3)</p> <p>M.9.4 Not reported (5)</p>

M.10 Appropriate data analysis techniques / reporting Very appropriate = pre & post intervention data (or change score) Appropriate = Post intervention data only See question F2 & K6	M.10.1 Very appropriate (1) M.10.2 Appropriate (2) M.10.3 Not appropriate (3) M.10.4 Not reported (5)
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Section N: Quality of the study - Weight of evidence

N.1 Weight of evidence A: Taking account of all quality assessment issues, can the study findings be trusted in answering the study question(s)? WoE A should be calculated from the Home Office QAT questions in section M as follows. Scores for questions (M1 to M9/3)+M10 3. High = total score 6 or less 2. Medium = Total Score 7 or 8 1. Low = Total Score of 9 or more	N.1.1 High trustworthiness N.1.2 Medium trustworthiness N.1.3 Low trustworthiness
N.2 Weight of evidence B: Appropriateness of research design and analysis for addressing the question, or sub-questions, of this specific systematic review. Use the Maryland Scale (SMS) Score (see question F4) 3. High = SMS score 5 2. Medium = SMS score 4 1. Low = SMS score 3	N.2.1 High N.2.2 Medium N.2.3 Low
N.3 Weight of evidence C: Relevance of particular focus of the study (including conceptual focus, context, sample and measures) for addressing the question, or sub-questions, of this specific systematic review Fixed Medium for all studies	N.3.1 High N.3.2 Medium N.3.3 Low
N.4 Weight of evidence D: Overall weight of evidence WoE D (WoE A + WoE B)/2 WoE D score can never be higher than the WoE A score. High =3 Medium = 2 Low = 1 WoE D scale 1-1.5 = low 2-2.5 = medium 3= high	N.4.1 High N.4.2 Medium N.4.3 Low

Appendix 2.4: Weight of Evidence framework details

Weight of evidence A: the soundness of studies (internal methodological coherence), based upon the study only.

Calculated from the Home Office QAT questions in section M as follows.

Scores for questions $((M1+M2+M3)/3) + (M4+M5+M6)/3 = (M7+M8+M9)/3) + M10$

3. High = total score 6 or less
 2. Medium = Total Score 7 or 8
 1. Low = Total Score of 9 or more
-

Weight of evidence B: Appropriateness of research design and analysis for addressing the question, or sub-questions, of this specific systematic review.

Use the Maryland Scale (SMS) Score

3. High = SMS score 5
 2. Medium = SMS score 4
 1. Low = SMS score 3
-

Weight of evidence C: Relevance of particular focus of the study (including conceptual focus, context, sample and measures) for addressing the question, or sub-questions, of this specific systematic review

Fixed Medium for all studies

Weight of evidence D: Overall weight of evidence

WOE D (WOE A + WOE B)/2

WOE D score can never be higher than the WOE A score.

1-1.5 = low - 2-2.5 = medium - 3= high

Appendix 2.5: Effectiveness interpretation framework

Consistent evidence of reducing re-offending

Any intervention in this category will have at least one study¹ that:

- Scores level 4-5 on the SMS scale
- Scores medium or high quality scores on the Weight of Evidence framework
 - where the result (weighted mean² or single effect size) shows a positive effect size [favouring the intervention] and where the lower 95% confidence interval does not cross the ‘line of no effect’

Negative effects consistent evidence:

Any intervention in this category will have at least one study¹ that:

- Scores level 4-5 on the SMS scale
- Scores medium or high quality scores on the Weight of Evidence framework
 - where the result (weighted mean² or single effect size) shows a negative effect size [favouring the intervention] where the upper 95% confidence interval does not cross the ‘line of no effect’

Potential effects (positive or negative) limited evidence

Any intervention in this category will have

One or more studies (that is/are not multi-centre randomised experiment(s)) that score level 4-5 on the SMS scale and medium or high quality on the Weight of Evidence framework

And

If there is more than 1 study the direction of effect is inconsistent

AND/or

the effect size(s) (pooled summary and/or individual) does not exclude ‘no difference’.

Insufficient evidence

Any intervention in this category will have no studies that are level 4/5 on the SMS scale and medium or high quality on the Weight of Evidence Framework

Notes

1. If there is only one study it should be Multi-centre Randomised Controlled Experiment
2. The weighted mean average should be obtained used a meta-analysis model that is appropriate to the degree of statistical heterogeneity identified (evidence of which should be provided), which in any case should measure $I^2 < 50\%$.

Adapted from:

Lipsey MW, Wilson DB, Cothorn L (2000) Effective interventions for Serious Juvenile Offenders. Washington. Office of Juvenile Justice and Delinquency Prevention

Farrington D, Gottfredson D, Sherman L, Welsh B (2002) The Maryland Scientific Methods Scale In (eds) Farrington D, MacKenzie D, Sherman L, Welsh L.. Evidence Based Crime Prevention. London. Routledge. Pp 13-21

Appendix 3.1: Results tables and figures

Table 3.1 Search sources (not mutually exclusive)

Source ⁵	Number of items
ERIC	1094
Applied Social Sciences Index and Abstracts	2235
Social Services Abstracts	1201
Sociological Abstracts	1634
Public Affairs Information Service database	460
PsychInfo pti	2625
National Criminal Justice Research Service	3928
Cochrane Library	129
Criminal Justice Abstracts	770
Criminology (Sage)	373
Home Office supplied papers	61
Home Office website	163
Google Scholar	31
RAND corporation	14
citation search - Mitchell 2006	31
National Institutes of Justice website	7
citation search - Latimer 2003	8
citation search - Restorative Justice Consortium (website)	8
citation search - Hayes 2006	7
citation search - Maxwell & Hayes 2006	10
citation search - Lipsey & Wilson 1998	1
Citation search - Hayes 2005/6	10
Expert contact Roxanne Lieb	30

⁵ We searched C2- SPECTR database but were not able to download the references obtained from this source. Neither the Campbell Collaboration or the software company who built C2-SPECTR able to help.

Table 3.2 Screening results

EXCLUDE 1. Not published in English	2
EXCLUDE 2. Published before 1998	37
EXCLUDE 3. No intervention	5803
EXCLUDE 4. Subjects not convicts or in care of CJS	1697
EXCLUDE 5. Participants over the age of 18	307
EXCLUDE 6. Is a review or over-view article	1010
EXCLUDE 7. No measure of CJS outcome for participation	946
EXCLUDE 8. Intervention is scared straight	4
EXCLUDE 9. Intervention is boot camp	68
EXCLUDE 10. Intervention focuses on family of offenders	145
EXCLUDE 11. Intervention is non custodial employment	9
EXCLUDE 12. Intervention=CBT	61
EXCLUDE 13. Intervention is targeted at gang members	91
EXCLUDE 14. no control group	146
EXCLUDE 15. Intervention is organization and management	15
EXCLUDE 16. Intervention is restorative justice only	9
EXCLUDE 17. Intervention is drug /alcohol therapy only	19
EXCLUDE 18. Intervention is for specific health problems	4
EXCLUDE 19. intervention targeted at sex offender	4
EXCLUDE 20. Intervention is about legal system /sentencing only	4
Linked papers: Multiple papers reporting 1 study	16
Excluded papers :	10395
Papers not obtained	10
Number of papers included	26

Table 3.3 Quality assessment score summary - Pre-sentencing diversion studies

Item	Quality of execution: WoE A:	Appropriateness of study design WoE B:	Relevance WoE C:	Overall weight of evidence D
Blechman et al. (2000)	Medium	Low	Medium	Medium
Butts, Buck & Coggeshall (2002)	Low	Low	Medium	Low
Forgays & DeMilio (2005)	Low	Low	Medium	Low
Franklin, Pucci & Arbabi (2002)	Low	Low	Medium	Low
Hanlon et al. (2002)	Low	Low	Medium	Low
Kelley, Kennedy, & Homant (2003)	High	Medium	Medium	High
King et al. (2001)	Low	Low	Medium	Low
Lobley, Smith & Stern (1999)	Low	Low	Medium	Low
Lobley, Smith & Stern (2001)	Low	Low	Medium	Low
Nee & Ellis (2005)	Low	Low	Medium	Low
Patrick & Marsh (2005)	Medium	High	Medium	Medium
Vignaendra & Fitzgerald (2006)	Low	Low	Medium	Low
Weisz, Lott & Thai (2002)	Low	Low	Medium	Low
Welsh, Jenkins & Harris (1999)	Low	Low	Medium	Low

Table 3.4 Mechanisms of change experimental pre-sentencing diversion interventions

Item	Surveillance and monitoring	Residential placement	Constructive use of Leisure time	Connecting actions with consequences	Personal skills training	Use of positive peer pressure	Identification with social rules, norms, networks	Vocational education and training	Personalization of intervention	Work to strengthen family bonds
Blechman, et al. 2000 Diversion plus skills training			x		x					
Blechman, et al. 2000 Diversion plus mentoring				x			x			
Butts, Buck & Coggeshall (2002) (all sites)				x	x	x	x	x		
Forgays & DeMilio (2005)				x	x	x	x	x		x
Franklin, et al. (2002)			x						x	
Hanlon, et al. (2002)		x			x	x	x	x	x	
Kelley, Kennedy & Homant. (2003)			x		x			x	x	
King, et al. (2001)	x	x	x	x	x	x	x	x	x	
Lobley D, Smith D & Stern C (1999)	x	x			x	x	x	x	x	
Lobley D, Smith D & Stern C (2001)	x	x			x	x	x	x	x	
Nee & Ellis (2005)	x				x	x	x	x	x	x

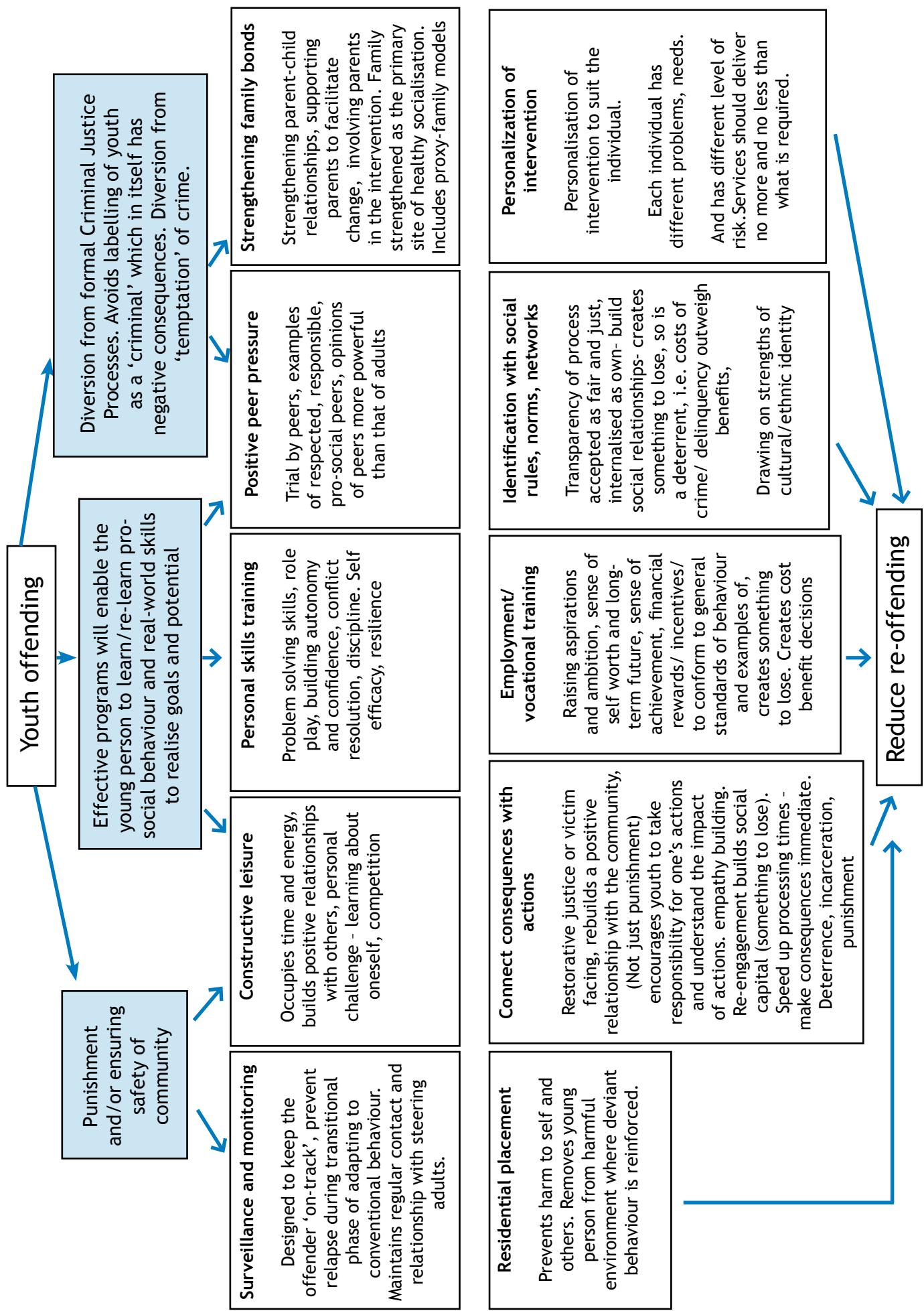
Item	Surveillance and monitoring	Residential placement	Constructive use of Leisure time	Connecting actions with consequences	Use of positive peer pressure	Personal skills training	Identification with social rules, norms, networks	Vocational education and training	Personalization of intervention	Work to strengthen family bonds
Patrick & Marsh (2005) Juvenile Accountability Group				x		x			x	
Patrick & Marsh (2005) Youth Court Group				x	x					
Vignaendra & Fitzgerald (2006)				x		x	x	x	x	
Weisz, Lott & Thai (2002)						x		x		
Welsh, Jenkins & Harris (1999) (present in all sites)					x			x		

Table 3.5 Post-sentencing quality assessment scores

Item	Quality of execution: WoE A:	Appropriateness of study design WoE B:	Relevance WoE C:	Overall weight of evidence D
Bowers DA (2002)	Low	Medium	Medium	Low
Drake & Barnoski (2006)	Medium	Medium	Medium	Medium
Eddy, Whaley, Chamberlain (2004)	Medium	High	Medium	Medium
Florsheim et al. (2004)	Low	Low	Medium	Low
Josi & Sechrest (1999)	Low	Low	Medium	Low
Leve, Chamberlain, & Reid (2005)	Medium	High	Medium	Medium
Litter, M (2005)	Low	Medium	Medium	Low
Nichols, G (1999)	Low	Low	Medium	Low
Ryan, Davis, Yang (2001)	Low	Low	Medium	Low
Scott et al. (2002)	Low	Low	Medium	Low
Youngbauer (1998)	Low	Low	Medium	Low

Table 3.6 Mechanisms of change for community based ‘family’ residential placement interventions

Item	Surveillance and monitoring	Residential placement	Constructive leisure	Connect consequences with actions	Positive peer pressure	Personal skills training	Employment/vocational training	Personalization of intervention	Identification with social rules, norms, networks	Strengthening family bonds
Eddy (2004)	x	x		x		x	x	x	x	x
Leve (2005)	x	x		x		x	x	x	x	
Youngbauer (1998)		x				x		x	x	x

Figure 4: Operational theories of change in the evaluated interventions

Appendix 3.2: Details of studies included in the review

Table A1: Sample and intervention summary

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Blechman, Elaine A; Maurice, Araya; Buecker, Betsy; Helberg, Clay. (2000) Can mentoring or skill training reduce recidivism? Observational study with propensity analysis.	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes <i>Juvenile Diversion program</i> <i>Juvenile Diversion plus skills training</i> <i>Juvenile Diversion plus mentoring</i>	Duration of the intervention 1 week (and 1 day) to 1 month Skills training regimen was significantly shorter ($M=22$ days, $SD=8$) Duration of the intervention 3 months (and 1 day) to 6 months <i>Juvenile Diversion with Mentoring</i> ($M=147$ days, $SD=127$) <i>Juvenile diversion without mentoring or skills training (control)</i> ($M=156$, $SD=65$)	Treatment/ intervention of the control/ comparison group Treatment as usual <i>Standard juvenile diversion</i>	Number of participants in the study (the actual sample) Explicitly stated $N=237$ $JD=137$ <i>JD plus skill training</i> =55 <i>JD plus mentoring</i> =45	Nature of offending by sample Violence against the person Burglary Theft and Handling Drug Offences Mixed offences

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type	
Bowers DA, (2002) Juvenile Corrections in the Institution versus the Community: The Experience of a Sample of Alabama Youth	Country where intervention carried out United States of America Maryland score Level 4	If a programme or intervention is being studied, does it have a formal name? Not stated/ unclear	Duration of the intervention Not stated	Treatment/ intervention of the control/ comparison group Treatment as usual institutional	Number of participants in the study (the actual sample) Explicitly stated Institutional=227 Alternative =164 Sex of participants Mixed sex Institutional males=75% females =25%	Nature of offending by sample Violence against the person Drug Offences Other offence felony arrests	
Butts J, Buck J, Coggeshall M (2002) The Impact of Teen Court on young offenders - Alaska	Country where intervention carried out United States of America Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Teen Court	Intensity of the Intervention Unclear/not stated	Main category of intervention Multi-component/ Comprehensive Contains CBT, wilderness programmes and other programmes not specified.	Person providing the intervention (tick as many as appropriate) Other () parole officer	Number of participants in the study (the actual sample) Explicitly stated Institutional males=71% females =29%	Nature of offending by sample Criminal damage minor property offences mixed offences other misdemeanours (non serious in nature)
	Overall weight of evidence Low	Type of intervention Multi-component/ Comprehensive	Was special training given to people providing the intervention? Not stated		Was special training given to people providing the intervention? Peer, Court worker	Treatment/ intervention of the control/ comparison group Treatment as usual Standard CJS processing (not diversion)	Nature of offending by sample Criminal damage minor property offences mixed offences other misdemeanours (non serious in nature)

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Arizona	Country where intervention carried out United States of America Teen Court Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Overall weight of evidence Low	Duration of the intervention One day or less Intensity of the Intervention Unclear/not stated different intensity for different sanctions Main category of intervention Diversion Type of intervention Multi-component/ Comprehensive	Treatment/ intervention of the control/ comparison group Treatment as usual Standard CJS processing (not diversion) Sex of Participants Mixed sex female= 38%	Number of participants in the study (the actual sample) Explicitly stated treatment group: n=115 comparison group: n=115 Ethnicity of the individuals within the actual sample Explicitly stated 66% White	Nature of offending by sample Criminal damage minor property offences mixed offences other misdemeanours (non serious in nature)
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Maryland	Country where intervention carried out United States of America Teen Court Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Overall weight of evidence Low	Duration of the intervention different sanctions ordered by Teen Court of different intensities/ duration Person providing the intervention Peer Type of intervention Diversion	Treatment/ intervention of the control/ comparison group Treatment as usual Standard CJS processing (not diversion) Person providing the intervention (tick as many as appropriate) Court worker Type of intervention Diversion	Number of participants in the study (the actual sample) Explicitly stated treatment group: n=154 comparison group n=62 Sex of Participants Mixed sex, 39% female Ethnicity of the individuals within the actual sample Not stated/unclear	Nature of offending by sample Theft and Handling shoplifting Criminal damage vandalism Other offence alcohol violations

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Missouri	Country where intervention carried out United States of America Teen Court Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Overall weight of evidence Low	Duration of the intervention Other different sanctions ordered by Teen Court of different intensities/ duration Intensity of the Intervention Unclear/not stated different sanctions ordered by Teen Court of different intensities/ duration Person providing the intervention (tick as many as appropriate) Peer	Treatment/ intervention of the control/ comparison group Treatment as usual Standard CJS processing (not diversion)	Number of participants in the study (the actual sample) Explicitly stated Treatment group: n=142 comparison group: n=142 Sex of participants Mixed sex female= 39%	Nature of offending by sample Theft and Handling shoplifting Criminal damage vandalism Other offence truancy
Drake E, Barnoski R (2006b) The effects of parole on recidivism: Juvenile offenders released from Washington State Institutions, Final report	Country where intervention carried out United States of America Washington state Maryland score Level 4	If a programme or intervention is being studied, does it have a formal name? Yes Overall weight of evidence Medium	Type of intervention Multi-component/ Comprehensive Duration of the intervention Other Intervention is Parole: i.e.: early release from detention Main category of intervention Probation Type of intervention Probation	Treatment/ intervention of the control/ comparison group Treatment as usual no parole - i.e.: no early release from prison	Number of participants in the study (the actual sample) Explicitly stated Total n=2195 Parole n=1473 Control n=722 Sex of participants Mixed sex Parole = 88% male, 18% female Control = 90% male, 10% female Coding is based on: Authors' description	Nature of offending by sample mixed offences All but high risk and sex offenders'

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Eddy, J M; Whaley, R B; Chamberlain, P (Mar 2004) The Prevention of Violent Behaviour by Chronic and Serious Male Juvenile Offenders: A 2-Year Follow-up of a Randomized Clinical Trial	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes multidimensional treatment foster care (MTFC)	Duration of the intervention 6 months (and 1 day) to 1 year typically 6-9 months <i>(from Chamberlain and Smith book chapter)</i>	Treatment/intervention of the control/comparison group Treatment as usual “Youth assigned to Group Care (GC) were placed in one of 11 group home programs around the state. From 6 to 15 offenders lived in each group home. All programs used rotating shift staffing. Although the type of treatment used in GC programs varied, the majority used some variation of the Positive Peer Culture approach. In most homes, youth participated in both individual and group therapy during at least part of their stay and attended program operated schools. Youth were encouraged to maintain relationships with family members, and 55% of GC participants had at least come family therapy sessions.”	Number of participants in the study (the actual sample) Explicitly stated Total sample N=79 I N=37 C N=42 Sex of participants Single sex Male (information from Chamberlain and Reid 1998) Sex of participants Coding is based on: Reviewers' inference	Nature of offending by sample Other offence Adolescent chronic and serious offenders” “The committee did not refer youth with serious substance abuse problems or youth deemed an extreme threat to the community”

Florsheim P, Behling S, South M, Fowles T, DeWitt J (2004) Does the youth corrections system work? Tracking the effectiveness of intervention efforts with delinquent boys in state custody	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? No	Duration of the intervention Other Mean days in programme: Detention = 115.4 (95.2) Work program = 39.6 (52.5) Proctor home = 123.4 (138.5) Group home = 11.2 (46.5) Intensive group home = 200.7 (184.2) Wilderness program = 15.0 (33.3) Secure care facility (102.4) 209.	Treatment/ intervention of the control/comparison group Alternative intervention 7 different interventions are compared	Nature of offending by sample Violence against the person Criminal damage Drug Offences
	Maryland score Level 3	Main category of intervention Organization and management	Intensity of the intervention Unclear/not stated Not reported	Sex of participants Single sex 100% male	Ethnicity of the individuals within the actual sample Explicitly stated Study 1 - 59.8% white, 26.8% Hispanic, 13.4% other Study 2 - 59.3% white, 26.6% Hispanic, 14.1% other
	Overall weight of evidence Medium	Type of intervention Opportunities provision	Person providing the intervention (tick as many as appropriate) Other () A range of different staff, some professional, some non-professional, foster parents, etc.		
	Weight of evidence D: Overall weight Low	Diversification Anger / aggression management programmes or similar	"Programs varied in regard to several dimensions, including staff-youth ratios"	Was special training given to people providing the intervention? Not stated Not reported	

Item	ID info	Intervention type	Resources for Intervention	Control group	Offence type
Forgays, Deborah K., Lisa DeMilio, Lisa (Feb 2005) Is Teen Court effective for repeat offenders a test of the restorative justice approach	Country where intervention carried out United States of America Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Teen Court Overall weight of evidence Low	Duration of the intervention 1 month (and 1 day) to 3 months completion Intensity of the Intervention Unclear/not stated Person providing the intervention (tick as many as appropriate) Peer Court worker Main category of intervention Diversion	Treatment/intervention of the control/comparison group Treatment as usual Other diversion Sex of participants Mixed sex Intervention = 65.4% male Control = not reported Sex of participants Coding is based on: Authors' description	Nature of offending by sample Violence against the person Theft and handling Criminal damage Drug Offences mixed offences Ethnicity of the individuals within the actual sample Explicitly stated The offenders who chose to report ethnicity indicated either White and Caucasian (85%) or Other (15%). Parent demographic data were not available.

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Franklin, Glen A.; Pucci, Pamela S.; Arhabi, Samam (2002) Decreased juvenile arson and fire setting recidivism after implementation of a multidisciplinary prevention program	Country where intervention carried out United States of America	If a programme or intervention studied, does it have a formal name? No	Duration of the intervention One day or less	Treatment/intervention of the control/comparison group Typically the notBOPP group received no counselling or only a brief counselling by a fire-fighter on one occasion	Number of participants in the study (the actual sample) Explicitly stated 132 Intervention 102 controls	Nature of offending by sample Other offence Fire setting

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Hanlon, Thomas E; Bateman, Richard W; Simon, Betsy D; O'Grady, Kevin E; Carswell, Steven B (December 2002) Early Community-Based Intervention for the Prevention of Substance Abuse and Other Delinquent Behaviour	Country where intervention carried out United States of America Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? No no specific name for programme, but intervention and control groups attended intervention programme at 'youth bureaus'.	Duration of the intervention 1 month (and 1 day) to 3 months <i>Individual counselling durations in both the experimental and control clinics were typically brief, with continuous client involvement beyond 3 months occurring in only a small percentage of cases.</i>	Treatment/intervention of the control/comparison group Treatment as usual Diversion Plus standard social work counselling	Nature of offending by sample mixed offences Forty-three percent of the sample reported having ever been involved in crime related deviant activity, and almost two thirds of these individuals were arrested at one time or another. Intensity of the Intervention 2-4 per week This approach employed mentoring positions staffed by representative role models from the community (young African-American college students), who were available to participants during group mentoring sessions conducted 4-5 days/week after school (and occasionally on weekends) and averaging approximately 20 children/session.	Nature of participants in the study (the actual sample) Explicitly stated Of the 428 study participants, 235 were involved in the intervention program and 193 in the control program. Sex of participants Mixed sex The numbers of male and female youth for the total sample were 251 (59%) and 177 (41%), respectively. The male/female breakdown for the intervention clinic sample was 125 (53%) vs. 110 (47%) and that for the control clinic sample 126 (65%) vs. 67 (35%). A variety of deviant, or criminal, activity was reported, ranging from minor offences (which, as expected, were most frequent) to serious offences, including robbery and assault.

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
		<p><i>conflict resolution; the avoidance of substance abuse, including the use of tobacco, alcohol, and other drugs; an explanation of the HIV/AIDS epidemic and of the urgent need to prevent its spread; and the availability of potentially useful community health and recreational resources.</i></p> <p><i>Special holiday celebration activities and field trips program-sponsored parent/child social events.</i></p>	<p>Was special training given to people providing the intervention? Yes <i>The intervention used in the experimental clinic consisted of individual counselling provided by existing clinic personnel who, for study purposes, were trained in a case management approach involving needs assessment, planning and review of mutually agreed upon treatment goals, and advocacy referral procedures. During the early months of the project, emphasis was placed on counsellor training in the prescribed case management approach and on the development of a manual that was subsequently used as a standard guide for a case review process and the provision and documentation of services. Counsellors were also provided assistance in locating and contacting community resources to facilitate referral for special client/family needs.</i></p>		<p>Ethnicity of the individuals within the actual sample Explicitly stated Over the 3-year intake period, 428 youth [417 African-American (97.43%) and 11 white (2.57%)] were admitted into the study.</p> <p>Twenty-nine percent reported ever having carried a weapon; 3% reported that they had shot at someone. In spite of the relatively young age of the sample, 41% of the participants reported that they had experienced sexual intercourse.</p>	

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Josi, A; Sechrest, DK (1999) A Pragmatic Approach to Parole Aftercare: Evaluation of a Community Reintegration Program for High-Risk Youthful Offenders	Country where intervention carried out United States of America Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes <i>Lifeskills'95</i>	Duration of the intervention 3 months (and 1 day) to 6 months “13 consecutive weekly meetings”	Treatment/intervention of the control/comparison group Treatment as usual Normal parole services	Number of participants in the study (the actual sample) Explicitly stated 230 Intensity of the Intervention 1-2 per week 3-hour duration weekly sessions	Nature of offending by sample Other offence described as chronic juvenile offenders Sex of Participants Mixed sex 95% plus male Ethnicity of the individuals within the actual sample Explicitly stated Hispanic about 48% African American about 37% White about 25%

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Kelley, Thomas M; Kennedy, Daniel B; Homant, Robert J. (2003) Evaluation of an Individualized Treatment Program for Adolescent Shoplifters. [References].	Country where intervention carried out United States of America Maryland score Level 4	If a programme or intervention is being studied, does it have a formal name? No	Duration of the intervention Not stated	Treatment/intervention of the control/comparison group Treatment as usual Standard diversion - Youngsters in the control group received no intervention other than monthly meetings with their youth assistance workers. Person providing the intervention (tick as many as appropriate) Probation service “Youth assistance workers (i.e. professional juvenile court probation officers)”	<p>Number of participants in the study (the actual sample) Explicitly stated Total sample N=286 Treatment group N=143 Control group N=143</p> <p>Sex of Participants Mixed sex 56% male 44% female</p>	<p>Nature of offending by sample Theft and handling</p> <p>Ethnicity of the individuals within the actual sample Explicitly stated 85% Caucasian 12% African American 3% Hispanic</p>

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
King, W R; Holmes, S T; Henderson, M L; Latessa, E J (Oct 2001) The community corrections partnership: examining the long-term effects of youth participation in an Afro centric diversion program	Country where intervention carried out United States of America Cincinnati Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Community Corrections Partnership (CCP)	Duration of the intervention Not stated	Treatment/intervention of the control/comparison group Treatment as usual Standard Diversion - youth supervision (probation) Intensity of the Intervention Daily Mon-Fri after school	Number of participants in the study (the actual sample) Explicitly stated Total n=421 Intervention n=281 Control n=140 Sex of Participants Mixed sex 100% male	Nature of offending by sample Not stated Not stated but "not violent offences"

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Leve, Leslie D; Chamberlain, Patricia; Reid, John B (Dec 2005) Intervention Outcomes for Girls Referred from Juvenile Justice: Effects on Delinquency	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes <i>Multidimensional Treatment Foster Care</i>	Duration of the intervention Other The mean length of stay in the randomized intervention placement was 174 days (SD 144 days), and the average time between baseline (BL) and intervention entry was 47 days.	Treatment/ intervention of the control/ comparison group Alternative intervention <i>Control Condition</i> GC girls went to 1 of 19 community-based group care programs located throughout the state of Oregon. These programs represented typical services for girls being referred to out-of-home care by the juvenile justice system. The programs had 2 to 51 youth in residence (M 21), 1 to 50 staff members (Mdn 2), and on-site schooling. Although the programs differed somewhat in their theoretical orientations, 86% of the programs reported that they endorsed a specific treatment model, of which the primary philosophy of their program was a behavioural (70%), eclectic (26%), or family style therapeutic approach (4%). Seventy percent of the programs reported that they delivered therapeutic services at least weekly.	Number of participants in the study (the actual sample) Explicitly stated N=81 <i>Intervention group = 37</i> <i>Control group = 44</i>	Nature of offending by sample Not stated

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Litter, Michael. (2005) Relationship-based psychotherapy with court-involved youth: The therapy, relationship's effect on outcome.	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes <i>The Cleo Eulau Center Collaborative Counselling Program (CECCCP)</i>	Duration of the intervention 6 months (and 1 day) to 1 year longest was nine months	Treatment/intervention of the control/comparison group Treatment as usual no therapy plus normal court interventions	Number of participants in the study (the actual sample) Explicitly stated intervention group N=48 comparison group N=27	Nature of offending by sample mixed offences

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Lobley D, Smith D, Stern C (1999) Working with persistent juvenile offenders: An evaluation of the Apex Cue Ten project	Country where intervention carried out United Kingdom Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Cue Ten	Duration of the intervention 3 months (and 1 day) to 6 months “it makes sense to treat the second half of the Cue Ten programme as a single block of thirteen weeks, which was distinguished from the first half because full time (or near full time) attendance at the project was no longer required.” Intensity of the Intervention Daily	Treatment/intervention of the control/comparison group Treatment as usual Not clear - assume diversion as usual Completers: 24 comparison group: 39	Number of participants in the study (the actual sample) Explicitly stated 86 young people in total - of which: number of charges 3 (<1%) Criminal damage fire-raising/ vandalism number of young people 46 (53%) number of charges 146 (16%) Sex of participants Mixed sex 13 young women attended the project the number of young women in each group is shown in brackets	Nature of offending by sample Violence against the person non-sexual violence number of young people 11 (13%) number of charges 17 (2%) Sexual Offences crimes of indecency number of young people 2 (2%) number of charges 3 (<1%) Criminal damage fire-raising/ vandalism number of young people 46 (53%) number of charges 146 (16%) Ethnicity of the individuals within the actual sample Not stated/ unclear mixed offences miscellaneous offences number of young people 47 (55%) number of charges 165 (18%) Other offence other crimes number of young people 10 (12%) number of charges 17 (2%)

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Lobley D, Smith D, Stern C (2001) Freagarrach: An evaluation of a project for persistent juvenile offenders	Country where intervention carried out United Kingdom Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Not stated/unclear	Duration of the intervention 6 months (and 1 day) to 1 year the guideline period of attendance started off at 6 months...the average length of stay was not as short as this Intensity of the Intervention 2-4 per week three direct face-to-face contacts with the project every week during the period of attendance, each contact lasting 1.5 and 2.5 hours. If staff felt that specific circumstances warranted closer supervision or increased intensity of work, they negotiated more frequent contacts. Freagarrach claimed to provide a programme of supervision whose intensity and duration were commensurate with a young person's risk of reoffending	Treatment/intervention of the control/comparison group Treatment as usual Not clear - assume diversion as usual the other comparison group was identified specifically for this evaluation of Freagarrach built up from data held by the Reporter's Administration If staff felt that specific circumstances warranted closer supervision or increased intensity of work, they negotiated more frequent contacts. Freagarrach claimed to provide a programme of supervision whose intensity and duration were commensurate with a young person's risk of reoffending	Number of participants in the study (the actual sample) Explicitly stated 95 young people for whom follow up data is available 52 young people as a comparison group from the Central Belt of Scotland built from data from the Reporter's administration - roughly matched in terms of age and gender 39 young people from the evaluation of the CueTen project combined in order to create a comparison group similar in size to that of Freagarrach	Nature of offending by sample Violence against the person non sexual violence against the person=70% Sexual Offences crimes of indecency=5% Criminal damage Fire-raising/vandalism=73% other dishonesty crimes of dishonesty=95% mixed offences miscellaneous offences=86% Other offence other crimes 27%

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Myers WC, Burton P, Sanders PD, Donat KM, Cheney JO, TM, Fitzpatrick TM, Monaco L (2000) Project Back-on- Track at 1 Year: A Delinquency Treatment Program for early career juvenile offenders.	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes <i>Project Back-on-Track</i>	Duration of the intervention 1 week (and 1 day) to 1 month 4 weeks	Treatment/ intervention of the control/ comparison group Treatment as usual	Number of participants in the study (the actual sample) Explicitly stated N=41	Nature of offending by sample Violence against the person Robbery

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Nee, Claire; Ellis, Tom (Feb 2005) Treating offending children: what works?	Country where intervention carried out United Kingdom Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes The Persistent Young Offender Project (PYOP)	Duration of the intervention 6 months (and 1 day) to 1 year This article focuses on the 41 participants aged between 7 and 16 who received more than 6 months of intervention, and have therefore been assessed for evaluation measures at least twice.	Treatment/intervention of the control/comparison group Explicitly stated Intervention: 41 Control: 19 Intensity of the Intervention Unclear/not stated The type and dosage of interventions were continually adjusted over time, depending on changing need.	Number of participants in the study (the actual sample) Explicitly stated Intervention: 41 Control: 19 Sex of participants Mixed sex Intervention: male N: 40 female N: 1 not stated for Control group	Nature of offending by sample mixed offences Ethnicity of the individuals within the actual sample Explicitly stated ethnicity was not collected systematically, we know that 37 of these were white.' p137

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Nichols, G (May 1999) Developing a rationale for sports counselling projects	Country where intervention carried out United Kingdom Maryland score Level 3	If a programme or intervention studied, does it have a formal name? Yes West Yorkshire Sports Counselling (WYSC)	<p>Duration of the intervention 3 months (and 1 day) to 6 months 12 weeks structured “Although the formal length of the programme was 12 weeks, sports leaders maintained informal contact with participants and this allowed them to act as a broker of further sporting opportunities”</p> <p>Intensity of the Intervention 1-2 per week</p>	<p>Treatment/intervention of the control/comparison group Treatment as usual Probation service clients</p>	<p>Number of participants in the study (the actual sample) Implicit Total N=72 Intervention (sports counselling) = 36 Control = 36</p> <p>Sex of participants Not stated/unclear Not reported Sex of participants Coding is based on: Authors' description</p>	<p>Nature of offending by sample Not stated</p> <p>Ethnicity of the individuals within the actual sample Not stated/unclear Not reported</p>

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Patrick, Steven; Marsh, Robert (March 2005) Juvenile Diversion: Results of a 3-Year Experimental Study	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? No	<p>Duration of the intervention 1 year (and 1 day) to 2 years</p> <p>"When the program began, the four groups (control group and three experimental groups) were set up, and first-time juvenile offenders charged with the status crimes of tobacco or alcohol possession were randomly assigned to one of the four groups. At the end of 1 year, the experiment assignment was halted, and the groups analyzed." pg 62</p>	<p>Treatment/ intervention of the control/ comparison group</p> <p>Treatment as usual</p> <p>Standard diversion = brief assessment and interview</p>	<p>Number of participants in the study (the actual sample)</p> <p>Explicitly stated N=398</p>	<p>Nature of offending by sample</p> <p>Other Offence tobacco or alcohol possession</p>

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Ryan, J P; Davis, R K; Yang, H (May 2001) Reintegration services and the likelihood of adult imprisonment: a longitudinal study of adjudicated delinquents	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes Starr Commonwealth residential programme, with continuum care	Duration of the intervention 6 months (and 1 day) to 1 year “The average length of residential stay was 9.87 months”	Treatment/intervention of the control/comparison group Alternative intervention One control group consisted of participants who failed to graduate from treatment (N=106)	Number of participants in the study (the actual sample) Explicitly stated N=397 Graduates = 291 Non-graduates = 106	Nature of offending by sample Violence against the person Sexual Offences Burglary Robbery Theft and Handling Fraud or forgery Criminal damage

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Scott KK, Tepas JJ, Frykberg E, Taylor PM, Plotkin AJ (2002) Turning point: Rethinking Violence-- evaluation of program efficacy in reducing adolescent violent crime recidivism.	Country where intervention carried out United States of America	If a programme or intervention is being studied, does it have a formal name? Yes <i>Turning Point: Rethinking Violence</i>	<p>Duration of the intervention 1 year (and 1 day) to 3 months 6 weeks</p> <p>Intensity of the Intervention Unclear/not stated 14 hours face-to-face time over 6 weeks</p> <p>Main category of intervention Anger / aggression management programmes or similar</p> <p>Overall weight of evidence Low</p>	<p>Treatment/intervention of the control/comparison group Treatment as usual typically 100 hours of community service</p> <p>Person providing the intervention (tick as many as appropriate)</p> <p>Counsellor trauma counsellors</p> <p>Health professional trauma surgeons and other health workers</p> <p>Psychologist trauma psychologists</p> <p>Other () organisations such as Mothers Against Drink Driving, parents who have lost children through violence</p>	<p>Number of participants in the study (the actual sample) Explicitly stated Intervention N=38 Control N=38</p> <p>Sex of participants Single sex 100% male Sex of participants Coding is based on: Authors' description</p> <p>Ethnicity of the individuals within the actual sample Explicitly stated Intervention: African American 63% Caucasian 34% Other 3%</p> <p>Control: African American 63% Caucasian 34% Other 3%</p>	<p>Nature of offending by sample Violence against the person Sexual Offences Robbery Other offence weapon offences</p> <p>Was special training given to people providing the intervention? Not stated</p>

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Vignaendra S, Fitzgerald J (2006) Reoffending among young people cautioned by police or who participated in a youth justice conference	Country where intervention carried out Australia Maryland score Level 3	If a programme or intervention is being studied, does it have a formal name? Yes Police cautioning Youth Justice conference	Duration of the intervention Not stated	Treatment/intervention of the control/comparison group Treatment as usual Police Caution	Number of participants in the study (the actual sample) Explicitly stated 5981	Nature of offending by sample Violence against the person Theft and Handling Criminal damage Other offence
Weisz, Victoria; Lott, Roger C; Thai, Nghi D. (2002) A Teen Court evaluation with a therapeutic jurisprudence perspective. [References].	Overall weight of evidence Low	If a programme or intervention is being studied, does it have a formal name? Yes Teen Court	Intensity of the Intervention Unclear/not stated	Person providing the intervention (tick as many as appropriate) Police officer	Sex of participants Mixed sex 4168 male 1789 female	Ethnicity of the individuals within the actual sample Not stated/unclear

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Welsh WN, Jenkins PH, Harris PW (1999) Reducing minority overrepresentation in juvenile justice: results of community- based delinquency prevention in Harrisburg	Country where intervention carried out United States of America Maryland score Level 3 For data used to calculate effect sizes	If a programme or intervention is being studied, does it have a formal name? Yes Youth Enhancement Services (YES)	<p>Duration of the intervention</p> <p>Other programme offered over the school year, participants ranged in attendance from 0 hours to a mean of 89 hours in one year for the high attendance group.</p> <p>Intensity of the Intervention</p> <p>1-2 per week Training in each area was provided to clients one day a week for forty-five minutes each.</p> <p>Person providing the intervention (tick as many as appropriate)</p> <p>Other () 'Coalition program staff'</p>	<p>Treatment/ intervention of the control/ comparison group</p> <p>Treatment as usual Control group = people never attended any programme</p>	<p>Number of participants in the study (the actual sample)</p> <p>Explicitly stated Total N=191</p> <p>Control group=83 Low attendance group=62 High attendance group</p> <p>Sex of participants</p> <p>Mixed sex Total sample: 60.8% male 39.2% female Control: 65.1% male 34.9% female Low: 58.7% male 41.3% female High: 56.7% male</p>	<p>Nature of offending by sample</p> <p>Not stated</p>

Item	ID info	Intervention type	Resources for Intervention	Control group	Sample size and ethnicity	Offence type
Youngbauer, John Gerard. (1998) The teaching-family model and treatment durability: Assessing generalization using survival analysis techniques.	Country where intervention carried out United States of America Maryland score Level 3	If a programme or intervention studied, does it have a formal name? Yes “Teaching-Family Model” “Non Teaching Family Model” Mean length of stay in program I = 363.88 days (260.332) Mean length of stay in program C = 243.15 days (184.911) Girls: Mean length of stay in program I = 296.05 days (200.283) Mean length of stay in program C = 221.37 days (142.711)	Duration of the intervention Other Boys: Mean length of stay in program I = 363.88 days (260.332) Mean length of stay in program C = 243.15 days (184.911) Girls: Mean length of stay in program I = 296.05 days (200.283) Mean length of stay in program C = 221.37 days (142.711)	Treatment/intervention of the control/comparison group Alternative intervention “14 homes selected by two Kansas State Agencies that funded youth services were asked to participate because they were considered representative non-Teaching-Family residential programs; all consented to participate”	Number of participants in the study (the actual sample) Explicitly stated Total N=429, of which 26 drop outs, so total entered into analysis N=403. Five youths died during follow-P, giving total remaining sample of N=398 I N=169 C N=229	Nature of offending by sample Violence against the person Sexual Offences Burglary Other offence “Most had committed both criminal offences (e.g. burglary, assault, rape) and status offences (acts illegal only for minors such as, truancy, curfew violations, running away from home)”

Table 2 : Summary of outcomes and results

Item	Study Information	Outcome Measure	Results reported by author
Blechman, Elaine A; Maurice, Araya; Buecker, Betsy; Helberg, Clay. (2000) Can mentoring or skill training reduce recidivism? Observational study with propensity analysis.	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Medium</p>	<p>Measure of recidivism used Arrest</p> <p>Length of follow-up to outcome 24 Months +</p> <p>“The mean length of post-intake follow-up was 2.62 years (range 2.06-3.41 years; SD=.33 years)”</p>	<p>Results of the study as reported by authors? <i>See forest plots for outcome data on recidivism</i></p> <p>“the average recidivism rate for US juvenile offenders is about 50% (Visher et al. 1991). Skills training achieved a significantly better rate of 37%, while mentoring (51%) and the standard juvenile diversion program (46%) performed close to base rate.</p> <p>Mean days to arrest (no control for baseline differences)</p>
Bowers DA, (2002) Juvenile Corrections in the Institution versus the Community: The Experience of a Sample of Alabama Youth	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 4</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Arrest</p> <p>Length of follow-up to outcome 24 Months +</p> <p>from 1 to three years</p>	<p>Results of the study as reported by authors? <i>Bivariate analysis:</i></p> <p>Alternative placements were a bit more successful with only a 58% failure rate, vs. institutional placements with a failure rate of 64%. This suggested that institutions were doing well with juvenile offenders with higher risk scores than alternative institutions with lower risk scores. When rearrest offences were broken down by drug crimes, crimes against property, and crimes against people there was amazingly little difference in outcomes between types of facilities. This result suggest that institutions do as well in reducing recidivism as alternative facilities.</p> <p>Multivariate analysis:</p> <p>recidivism/ non-recidivism controlling for sex, race, urban vs. rural, and whether the mother and/or father had psychological problems or served time in jail or prison.</p> <p>when risk was controlled for, binomial logit analysis did not find any difference in the impact of institutional or alternative detention on recidivism</p>

Item	Study Information	Outcome Measure	Results reported by author
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Alaska	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p>	<p>Measure of recidivism used Report of CJS staff</p> <p>New Delinquency referral to the Alaska Department Juvenile Justice within six months of the DJJ referral that originally led the youth to be diverted to Anchorage Youth Court</p> <p>Length of follow-up to outcome Under 12 months 6 months</p> <p>Overall weight of evidence Low</p>	<p>Results of the study as reported by authors?</p> <p>ETC finding Significant difference: <i>Teen Court recidivism lower than comparison group</i></p> <p>In one of the comparisons that was statistically significant, for example, 12 percent of Alaska youth reporting low social bonds recidivated within six months of their court appearance, while none of the youth reporting high social bonds recidivated</p>
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Arizona	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p>	<p>Measure of recidivism used Court appearance</p> <p>New delinquency referral to juvenile Court in Maricopa County within six months of the referral that originally led to the youth to be diverted to Teen Court</p> <p>Length of follow-up to outcome Under 12 months 6 months</p> <p>Overall weight of evidence Low</p>	<p>Results of the study as reported by authors?</p> <p>In Arizona, the difference in recidivism between Teen Court and youth handled by the regular juvenile justice process also favoured the Teen Court programs, but the size of the difference failed to reach statistical significance, Youth were re-referred to juvenile court in 9 percent of cases from the Tempe and Chandler Teen Courts, compared with 15 percent of the comparison group cases handled by juvenile court.</p> <p>The analysis also examined youth recidivism for each of the courtroom models used by the programs in the Arizona site. There were virtually no difference in rates of re-offending between youth handled by the adult judge model and those handled by with the peer jury model (8% and 10%, respectively)</p> <p>In Arizona, Teen Court may have been associated with a reduced probability of referral, although the difference was not statistically significant.</p> <p>...from the perspective of the ten court defendant, the youth attorneys and peer juries in Arizona ...may appear to play their roles at the behest of the adults who run the court room</p>

Item	Study Information	Outcome Measure	Results reported by author
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Maryland	Country where intervention carried out United States of America Maryland score Level 3 Overall weight of evidence Low	Measure of recidivism used Arrest New citation or arrest by Montgomery County Police within six months of the arrest that originally led to the youth to be diverted to Teen Court	Results of the study as reported by authors? ...from the perspective of the ten court defendant, the youth attorneys and peer juries in Maryland ...may appear to play their roles at the behest of the adults who run the court room
	Length of follow-up to outcome Under 12 months 6 months		no significant difference between recidivism rates of treatment group and comparison group
Butts J, Buck J, Coggeshall M (2002) The impact of Teen Court on young offenders - Missouri	Country where intervention carried out United States of America Maryland score Level 3 Overall weight of evidence Low	Measure of recidivism used Court appearance New delinquency referral to Jackson County Family Court within six months of the arrest that led to the original referral to Independence Youth Court	Results of the study as reported by authors? ETC finding Significant difference: Teen Court recidivism lower than comparison group
Drake E, Barnoski R (2006b) The effects of parole on recidivism: Juvenile offenders released from Washington State Institutions, Final report	Country where intervention carried out United States of America Washington state Maryland score Level 4 Overall weight of evidence Medium	Measure of recidivism used Guilty sentence (Adjudication) Defined in study as 'convictions' in juvenile or adult court "Recidivism is defined as any offense committed after release to the community that results in a Washington State conviction. This includes convictions in juvenile and adult court. Three types of recidivism are reported: Violent felony convictions, felony convictions, including violent felonies Total recidivism, including felonies and violent felonies, in addition to misdemeanour convictions"	Results of the study as reported by authors? Exhibit 1 shows no significant differences in the observed characteristics of the Parole and No- Parole Groups. Juveniles who were released without parole are similar to juveniles released with parole in each area except that they did not have parole. There are, however, significant differences between Parole Cohorts 1 and 2 on three characteristics: prior admissions to JRA, residential length of stay, and criminal history. Youth in Parole Cohort 2 have slightly fewer JRA admissions, longer residential stays, and lower criminal history scores than youth in Parole Cohort 1. This indicates that youth in Cohort 2 are lower risk than those in Cohort 1. 1. We control for these systematic differences using multivariate statistical analysis in the recidivism outcomes.
	Length of follow-up to outcome 24 Months + 12, 18, 24, 30 and 36 months follow up		

Item	Study Information	Outcome Measure	Results reported by author
Eddy, J M; Whaley, R B; Chamberlain, P (Mar 2004) The Prevention of Violent Behavior by Chronic and Serious Male Juvenile Offenders: A 2-Year Follow-up of a Randomized Clinical Trial	Country where intervention carried out United States of America	Measure of recidivism used Self-reported (by offender) Other	<p>Based on these analyses, the MTFC program had a positive effect not only on general rates of offending and on self-reports of serious violent behaviour (Chamberlain and Reid 1998) but also on rates of official violent offences and self-reports of more common violent behaviours. Further, the MTFC, relative to GC (group care - the control) reduced the rates of self-reported violent offending into the normative range for at-risk and high-risk males. Finally a significantly greater number of GC vs. MTFC youth had multiple criminal referrals for violent offences in the 2 years following baseline. These analyses provide convincing data that MTFC prevented subsequent violent behaviour in boys who had a history of serious and chronic delinquency.</p>

Item	Study Information	Outcome Measure	Results reported by author
Florsheim P, Behling S, South M, Fowles T, DeWitt J (2004) Does the youth corrections system work? Tracking the effectiveness of intervention efforts with delinquent boys in state custody	Country where intervention carried out United States of America	Measure of recidivism used Other Juvenile charges Adult charges	<p>“Results indicated that participants with high delinquency severity scores spent significantly more time in detention facilities, wilderness programs, group homes, and secure care facilities. Youth who spent more time in detention also spent more time in secure care facilities, residential treatment, and wilderness programs. In addition, youth who spent more time in wilderness programs were likely to spend more time in work programs”</p> <p>“Results indicated that ethnicity was associated with adult criminal severity score, $F(2, 175) = 3.00$, $p=.05$. Post hoc analyses indicated that Latino youth had higher adult criminality scores than White youth. We also found that ethnicity was associated with time spent in group homes, $F(2, 175) = 3.54$, $p<.05$; youth in the ‘other’ ethnicity category spent more time in group homes than white youth”</p> <p>“Treatment history accounted for 9% of the variance in adult outcomes, $F(11, 164) = 4.40$, $p<.001$. More specifically, higher amounts of time spent in detention facilities, work programs, and group homes were associated with higher adult criminality scores”</p> <p>“Results of these analyses were not substantially different...there was no evidence that time spent in juvenile corrections programs was curvilinearly related to adult criminal outcomes”</p> <p>Time spent in Juvenile Correction program and adult criminality table: (EPPI notes: better described as: for offenders spending time in combination of interventions, time spent in which intervention is associated with recidivism)</p> <p>B SEB StB</p> <p>detention 0.01 0.01 .18*</p> <p>work prgrm 0.02 0.01 .19*</p> <p>wilderness -0.01 0.01 -.07</p> <p>proctor home 0.00 0.00 -.06</p> <p>group home 0.02 0.01 .15*</p> <p>residential home 0.00 0.00 .08</p> <p>secure care 0.00 0.00 -.03</p>

Item	Study Information	Outcome Measure	Results reported by author
Forgays, Deborah K; DeMilio, Lisa (Feb 2005) Is Teen Court effective for repeat offenders a test of the restorative justice approach	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Arrest</p> <p>Length of follow-up to outcome Under 12 months 6 months post-court-appearance</p>	<p>OUTCOME COMPARISON WITH RANDOMLY SELECTED CD YOUTH The following data were derived from Whatcom County Court records. We compared the outcomes of the Teen Court offenders with those of 26 randomly selected youth offenders referred for CD (first-time nonfelony offense).</p> <p>Thirteen of the CD offenders successfully completed their sentence; five failed to complete their sentence, and eight were returned either to the court or to the prosecuting attorney.</p> <p>No outcome information was available on the offenders whose cases went back to the traditional court system or were otherwise unresolved.</p> <p>Of the 18 for whom reoffense data were available, 4 CD youth reoffended with the following charges: three males were charged with shoplifting, and one male was charged with assault. Thus, 50% of the CD offenders successfully completed their diversion requirements, and 38% of those were subsequently charged with theft or assault.</p> <p>Based on this cohort comparison, it appears that the Teen Court Program has yielded positive results. A larger proportion successfully completed their sentence, and a smaller proportion reoffended when compared with the CD sample. There was a significant difference between the two groups, with Teen Court offenders more likely to complete their sentence, $\chi^2 (1, 52) = 11.34, p < .001$. The chi-square comparison on the recidivism data indicated a trend, with Teen Court offenders less likely to reoffend $\chi^2 (1, 37) = 3.35, p < .06$.</p>

Item	Study Information	Outcome Measure	Results reported by author
Hanlon, Thomas E; Bateman, Richard W; Simon, Betsy D; O'Grady, Kevin E; Carswell, Steven B (December 2002) Early Community-Based Intervention for the Prevention of Substance Abuse and Other Delinquent Behavior	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Community-Based Intervention for the Prevention of Substance Abuse and Other Delinquent Behavior</p>	<p>Measure of recidivism used Self-reported (by offender)</p> <p><i>Because it was indicative of more serious delinquent activity, self-reported information on contact with juvenile authorities, including arrest, probation/parole, conviction, and incarceration, was also examined.</i></p>	<p>Results of the study as reported by authors?</p> <p><i>1) Legal involvement</i></p> <p><i>Table III presents the logistic regression results for self-reported legal involvement status for the 6 months preceding the 1-year follow-up assessment. During this time, 17% of experimental clinic participants vs. 27% of control clinic participants had been either arrested, on parole or probation, convicted of a crime, or incarcerated. Although treatment condition did not contribute significantly to the prediction equation with respect to involvement with legal authorities at follow-up ($p > 0.13$), the overall logistic regression analysis was significant at the 0.0001 level.</i></p> <p><i>2) Frequency of delinquent activity</i></p> <p><i>Involvement in less frequent delinquent activity was significantly associated with enrolment in the experimental clinic program (an average of 3.05 instance of delinquent activity for the experimental clinic vs. 11.06 for the control clinic, with 7 experimental clinic participants and 27 controls having engaged in daily delinquent activity at follow-up).</i></p> <p>Length of follow-up to outcome 12-24 months</p> <p><i>For treatment evaluation purposes, assessment measures were obtained at baseline (at entrance into the clinic) and 1 year later.</i></p> <p>Overall weight of evidence Low</p>

Item	Study Information	Outcome Measure	Results reported by author
Josi, A; Sechrest, DK (1999) A Pragmatic Approach to Parole Aftercare: Evaluation of a Community Reintegration Program for High-Risk Youthful Offenders	Country where intervention carried out United States of America	Measure of recidivism used Arrest Other	Results of the study as reported by authors? After 90 days: “Individuals assigned to the control group were about twice as likely as experimental-group members to have been arrested” “(experimental group) 16 (14%) had one or more arrests. 5% were incarcerated in jail, 5% were listed as missing, fewer than 4% had been formally revoked for either a technical or criminal violation, and one had received a dishonorable discharge” “We found moderate involvement in criminal activity in a substantial percentage of those assigned to the control group, other than their illicit drug abuse. At 3 months, 26% had one or more arrests, 10% were incarcerated in jail, 12% were listed as missing, 7% had been formally revoked for either a technical or a criminal violation, 7% were on temporary detention (TD) status, and 2% had received a dishonorable discharge” 1 year follow-up: “Parolees who did not attend the ‘Lifeskills’95’ program were twice as likely as the experimental group members to have one or more arrests or to have failed in their parole” “37 of the 106 parolees (35%) assigned to the experimental group were unsuccessful in their parole attempt. Of the 37 who failed, 18 were officially revoked, seven were incarcerated awaiting new criminal charges, seven were missing, two were on temporary detention status awaiting revocation hearings, and three had received dishonourable discharges” “61 of the 115 parolees (53%) assigned to the control group were unsuccessful at parole. Of the 61 who failed, 35 were officially revoked, eight were incarcerated awaiting new criminal charges, five were missing, seven were on temporary detention status awaiting revocation hearings, and six had received dishonorable discharges” Time on parole: “On average, the 106 individuals assigned to the experimental group completed more than 80% of their possible number of days on parole (81.09%); the mean percentage for the 115 participants assigned to the control group was just over 60% (61.93). A t-test between group means provided significant ($t=4.25$, $df = 219$, $p<.001$) with a mean difference of about 19% in favour of the experimental group Parole failure: “Experimental-group members were significantly less likely than their counterparts to be removed from parole at three, six and nine months. At 90 days after release, about 11% of the experimental were unsuccessful compared with 37.5% of the controls ($p<.001$). At 6 months, about one in four (25.9%) of the experimental had been removed from parole, compared with about six in ten (58.2%) participants assigned to the control group ($p<.001$). At nine months, 46% of the experimental and 62% of the control group participants had been removed from active parole status ($p<.001$)”

Item	Study Information	Outcome Measure	Results reported by author
Kelley, Thomas M; Kennedy, Daniel B; Homant, Robert J. (2003) Evaluation of an Individualized Treatment Program for Adolescent Shoplifters. [References].	Country where intervention carried out United States of America Maryland score Level 4 Overall weight of evidence High	Length of follow-up to outcome 12-24 Months 2 year follow up period	<p>Results of the study as reported by authors?</p> <p>"Youths in the treatment group were significantly less likely to be recidivists ($\chi^2 = 32.72, P < .01$). Ten percent of the treatment group had new petitions filed during the two-year follow-up period, compared to 25% of the control group. Five youths in the treatment group were charged with a felony or misdemeanor other than shoplifting, 5 with a status offense (e.g., truancy, incorrigibility), and 3 with another shoplifting offense. For the control group, 12 youths were charged with a felony or misdemeanor other than shoplifting, 10 with a status offense, and 14 with another shoplifting offense.</p> <p>Regression analysis (Table 2) revealed that several background variables were significantly associated with recidivism. The strongest predictor of recidivism was the youth's decision to decline participation in the treatment program—Of the 9 youths who refused treatment, 5 (56%) were in more trouble during the two-year following-up period. In addition, youths with three or more siblings and youths from families with annual incomes of less than \$15,000 were more likely to be recidivists." (pg 732)</p>
King, W R; Holmes, S T; Henderson, M L; Latessa, E J (Oct 2001) The community corrections partnership: examining the long-term effects of youth participation in an Afrocentric diversion program	Country where intervention carried out United States of America Cincinnati Maryland score Level 3 Overall weight of evidence Low	Measure of recidivism used Arrest Court appearance Guilty sentence (Adjudication) Report of CJS staff	<p>Results of the study as reported by authors?</p> <p><i>Under supervision:</i> "The CCP youths are slightly less likely to be adjudicated for any new offense and less likely to receive a suspended commitment to DYS while under supervision" (see table 3, p568)</p> <p><i>Following release:</i> "CCP youths are less likely to be adjudged for a misdemeanor, violation, or for any adjudication following termination from CCP when time at risk is held constant. The remaining three comparisons (for felonies and suspended and permanent commitments to DYS) indicate insignificant differences between the CCP and probation groups following supervision"</p> <p><i>As adults:</i> There are no significant difference between CCP and probation juveniles on measures of adult arrests, sentences to probation and sentences to confinement (while holding time at risk constant) "Participation in CCP has no significant impact on adult criminality when compared to other youths solely sentenced to probation"</p>

Item	Study Information	Outcome Measure	Results reported by author
Leve, Leslie D; Chamberlain, Patricia; Reid, John B (Dec 2005) Intervention Outcomes for Girls Referred from Juvenile Delinquency Justice: Effects on Delinquency	Country where intervention carried out United States of America	Measure of recidivism used Self-reported (by offender) Arrest	Results of the study as reported by authors? Analyses of covariance indicated that MTFC youth had a significantly greater reduction in the number of days spent in locked settings and in caregiver-reported delinquency and had 42% fewer criminal referrals than GC youth (a trend) at the 12-month follow-up.
Litter, Michael. (2005) Relationship-based psychotherapy with court-involved youth: The therapy relationship's effect on outcome	Country where intervention carried out United States of America	Length of follow-up to outcome 12-24 Months Overall weight of evidence Medium	Results of the study as reported by authors? <i>Hypothesis 1- relationship-based psychotherapy will have an overall effect on pro-social attitudes and behaviours</i> Finding 1: Subjects in the Therapy Group (N=46, $M=.037$, $SD=.2$) showed a greater reduction in recidivism frequency trend than the No-Therapy group ($n=27$, $M=.21$, $SD=.54$), $F(1, 73) = 8$, $p=.006$, $r^2=.1$) There were two no therapy group outliers with very poor recidivism frequency trends. Without these two subjects the trend remained but the differences between the two groups became non-significant. Finding 2 Subjects in the therapy group ($n=47$, $M=3.34$, $SD=1.37$) achieved a more positive school program completions result than the no-therapy group subjects ($n=27$, $M=2.41$, $SD=1.58$) $F(1, 73) = 7.7$, $p=.009$, $r^2=.09$). Finding 3 Although non-significant at the .05 level, the subjects in the therapy group ($N=46$, $M=.72$, $SD=.41$) achieved a deeper reduction in recidivism severity than the no-therapy group subjects ($N=27$, $M=.54$, $SD=.47$), $F(1,72)=2.8$, $p=.097$, $r^2=.038$ Finding 4 subjects in the Individual Relationship Group ($N=26$, $M=-.09$, $SD=.15$) achieved a significantly better result in terms of recidivism frequency trend than the No Individual Relationship Group subjects ($n=47$, $M=.14$, $SD=.44$), $F(1,72)=6.4$, $p=.013$, $r^2=.08$.

Item	Study Information	Outcome Measure	Results reported by author
			<p>Finding 5 Subjects in the Individual Relationship group ($N=26$, $M=-.87$, $SD=.32$) achieved a significantly better result in terms of recidivism severity trend than the No-Individual Relationship Group subjects ($N=47$, $M=-.54$, $SD=.46$), $F(1, 72) = 10.8$, $p=.002$, $r^2=.13$). Hypothesis two- there will be a difference in overall effect on the outcome among the four treatment groups - group only, (GTO) individual only (ITO), group and individual therapy (IGTC) and no treatment (NTG). (recidivism findings only given in this DA).</p> <p>Finding 3 In terms of mean recidivism severity trend, the IGTC subgroup ($n=20$, $M=-.88$, $SD=.31$) performed better than the GTO subgroup ($n=20$, $M=-.53$, $SD=.45$), $F(3, 70) = 3.5$, $p=.01$, $r^2=.13$.</p> <p>Finding 4 in terms of mean recidivism severity trend, the IGTC subgroup ($n=20$, $M=-.88$, $SD=.31$) performed better than the NTG ($=6$, $M=-.54$, $SD=.47$), $F(3, 70) = 3.5$, $p=.009$, $r^2=.13$)</p> <p>Finding 5 Linear regression was used to determine if measures of therapeutic alliance VPPS Client rated Overall Relationship (OR), client rated negative relationship scale (NR), Client rated therapist warmth and friendliness scale (TWAF), therapist-rated OR, Therapist rated NR scale and Therapist rated TWAF scale</p> <p>Hypothesis 3 - The quality of the therapeutic relationship will influence outcome. Linear regression was used to determine if measures of therapeutic alliance VPPS Client rated Overall Relationship (OR), client rated negative relationship scale (NR), Client rated therapist warmth and friendliness scale (TWAF), therapist-rated OR, Therapist rated NR scale and Therapist rated TWAF scale</p> <p>Finding 1 client-rated OR strongly predicted recidivism frequency trend $R(22)=.69$, $p=.000$</p> <p>Finding 2 Client rated OR strongly predicted recidivism severity trend $R(22)=.71$, $p=.000$</p> <p>Finding 3 Client-rated NR moderately predicted recidivism frequency trend $R(22)=.47$, $p=.029$</p> <p>Finding 5 Client rated TWAF strongly predicted recidivism frequency trend $R(22)=.7$, $p=.000$</p> <p>Finding 6 Therapist rated TWAF moderately predicted recidivism severity trend $R(22)=.41$, $p=.06$</p> <p>Finding 7 Therapist OR modestly predicted recidivism frequency trend $R(44)=.3$, $p=.05$</p> <p>Finding 8 Therapist-rated OR modestly predicted recidivism severity trend $R(44)=.32$, $p=.032$</p> <p>Finding 9 Therapist-rated TWAF moderately predicted recidivism frequency trend $R(44)=.46$, $p=.002$</p> <p>Finding 10 Therapist-rated TWAF moderately predicted recidivism severity trend $R(22)=.5$, $p=.000$</p>

Item	Study Information	Outcome Measure	Results reported by author																																																												
Lobley D, Smith D, Stern C (1999) Working with persistent juvenile offenders: An evaluation of the Apex CueTen project	Country where intervention carried out United Kingdom Maryland score Level 3 Overall weight of evidence Low	Measure of recidivism used Guilty sentence (Adjudication) Reconviction Length of follow-up to outcome 12-24 months 12-24 months	<p>The analysis...has shown that there were important differences in the offending pattern of the young people who completed the CueTen programme and the other two groups (non-completers and the comparison group). There is little doubt that the project helped some young people modify their behaviour, and it does not require any special pleading to conclude from the figures that CueTen contributed to a reduction in both the frequency and the seriousness of the offending in the group who finished the programme. Only five (just over a fifth) of this group had ten or more offences recorded against them in the follow-up period, compared to twelve (35%) in the group who did not complete the programme and eleven (28% in the comparison group; and all six of the young people who had ten or more charges against them in the previous 12 months showed a reduced frequency of offending after starting CueTen. The differences are not statistically significant and it would not be sensible to claim confidently that the data on reconviction and subsequent charging demonstrate that the CueTen had a lasting effect on the offending of these young people</p> <p>The following table shows charges and convictions over time, neither SDs nor SEs are given, so it was not possible to calculate outcome data from this table.</p> <p>"It should be remembered that two young people committed the majority of the offences recorded against members of this group in the second year, and if they are excluded then the average figure for offending in this period becomes about 2.5; lower than for the other two groups.</p> <table border="1"> <thead> <tr> <th></th> <th>Charges and convictions Completers total</th> <th>12 months prior n=24</th> <th>12 months after n=24</th> <th>second 12 months period n=15</th> </tr> </thead> <tbody> <tr> <td>total</td> <td>155</td> <td>70</td> <td>85</td> <td></td> </tr> <tr> <td>average</td> <td>6</td> <td>3</td> <td>6</td> <td></td> </tr> <tr> <td>median</td> <td>4.5</td> <td>1.5</td> <td>1</td> <td></td> </tr> <tr> <th></th> <th>Charges and convictions Non-Completers total</th> <th>12 months prior n=34</th> <th>12 months after n=34</th> <th>second 12 months period n=14</th> </tr> <tr> <td>total</td> <td>491</td> <td>316</td> <td>120</td> <td></td> </tr> <tr> <td>average</td> <td>14</td> <td>9</td> <td>9</td> <td></td> </tr> <tr> <td>median</td> <td>11</td> <td>6.5</td> <td>5</td> <td></td> </tr> <tr> <th></th> <th>Comparison Group total</th> <th>12 months prior n=39</th> <th>12 months after n=39</th> <th>second 12 months period n=19</th> </tr> <tr> <td>total</td> <td>320</td> <td>215</td> <td>100</td> <td></td> </tr> <tr> <td>average</td> <td>8</td> <td>5.5</td> <td>6</td> <td></td> </tr> <tr> <td>median</td> <td>5</td> <td>4</td> <td>4</td> <td></td> </tr> </tbody> </table>		Charges and convictions Completers total	12 months prior n=24	12 months after n=24	second 12 months period n=15	total	155	70	85		average	6	3	6		median	4.5	1.5	1			Charges and convictions Non-Completers total	12 months prior n=34	12 months after n=34	second 12 months period n=14	total	491	316	120		average	14	9	9		median	11	6.5	5			Comparison Group total	12 months prior n=39	12 months after n=39	second 12 months period n=19	total	320	215	100		average	8	5.5	6		median	5	4	4	
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Lobley D, Smith D, Stern C (2001) Freagarrach: An evaluation of a project for persistent juvenile offenders	Country where intervention carried out United Kingdom	Measure of recidivism used Court appearance Measure of recidivism used Guilty sentence (Adjudication) severity of sentence as a proxy measure for severity of crime	<p>On average, young people attending Freagarrach had 10 charges or convictions against them in the previous 12 months (using Scottish Criminal Records Data) while the central belt comparison group averaged 4. These and other differences mean that a direct comparison is liable to be misleadingly to Freagarrach's disadvantage, since the Freagarrach young people - as a whole- were a higher risk group for subsequent reoffending than either of the other groups;; but the differences were not statistically significant (using chi square), and in fact a slightly higher proportion of the combined comparison groups had over 30 charges or convictions in the 2 years.</p> <p>Statistically non-significant differences - not to all Freagarrach's disadvantage - were also found between the Freagarrach group and the comparison groups (and the CueTen group itself) in comparing the total numbers of offences (from Scottish Criminal Records) before and after the date at which the young people began attending the projects or were included in a comparison group. Given the higher rate of offending in the Freagarrach group, it is perhaps surprising that no statistically significant differences were found - a result that could be interpreted as evidence that Freagarrach made a more positive difference relative to the range of measures to which the other groups were subject</p>
Myers WC, Burton P, Sanders PD, Donat KM, Cheney JO, Fitzpatrick TM, Monaco L (2000) Project Back-on- Track at 1 Year:	Country where intervention carried out United States of America	Measure of recidivism used Adjudication	<p>Results of the study as reported by authors?</p> <p>The number of youths with significantly higher offenses at 12 month follow up was higher in the community control than in the BOT completer group.</p> <p>At 12 month follow up there were no differences between the community control group and the BOT non-completers with regard to subsequent offenses or average number of crimes committed per youth. However during the same period, the youths in the BOT non-completer group, were significantly more likely to have committed an offence and had committed significantly more offenses, on average.</p>

Item	Study Information	Outcome Measure	Results reported by author			
Nee, Claire; Ellis, Tom (Feb 2005) Treating offending children: what works?	<p>Country where intervention carried out United Kingdom</p> <p>Measure of recidivism used Arrest police charges data</p> <p>Measure of recidivism used Other</p> <p>The Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995)</p> <p>Length of follow-up to outcome 24 Months +</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Recidivism data:</p> <p>Data was available for all of the 35 offenders aged 10 and over in Group 1 and all 19 members of the comparison group. Two outliers 11 from Group 1 who had dramatic increases in the number of charges against them during this period were removed from the analysis, leaving N ¼ 33 for Group 1. A mixed factorial ANOVA was carried out comparing police charges for the two groups for the 6 months before PYOP started, with the first 6 months during PYOP. A significant interaction was found between time and group ($F_{\delta 1}^{\circ}; 50P \frac{1}{4} 6:77, p \frac{1}{4}:01$) indicating a significantly greater reduction in police charges in PYOP Group 1 compared to the comparison group.</p> <p>The raw charges data suggested that around 70% of Group 1 had either reduced their level of offending (N ¼ 16) or had not been charged/re-offended at all while on the project (N ¼ 13). The 10 remaining participants, once the two outliers were excluded, showed only marginal change.</p> <p>With the exception of two participants in Group 1, all charges once intervention had begun were for minor property crimes, suggesting no increase in the seriousness of offending. When we compared the police charges data (for ages 10 and over) and reported re-offending data (for the under-10s) to changes in the LSI-R scores, we found that these correlated well with each other.</p>	<p>Results of the study as reported by authors?</p>			
Nichols, G (May 1999) Developing a rationale for sports counselling projects	<p>Country where intervention carried out United Kingdom</p> <p>Measure of recidivism used Guilty sentence (Adjudication)</p> <p>Reconvictions</p> <p>Maryland score Level 3</p> <p>Length of follow-up to outcome 24 months+ 2 years</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Reconviction:</p> <p>“Participants who had attended 8 weeks or more of the programme were less likely to have been reconvicted than their matched pairs ($p=0.02$). On the other hand the same test showed that participants who had attended seven weeks or less of sports counselling were not less likely to be reconvicted than their matched pairs ($p=0.69$),”</p> <p>Predicted v actual reconviction rates:</p> <table> <tr> <td>Predicted recon. Rate Actual recon. N</td> </tr> <tr> <td>2 years 63.8% 49.0% 49</td> </tr> <tr> <td>18 months 56.86% 44.44% 63</td> </tr> </table> <p>“The binomial test showed that the differences between the predicted and actual reconviction rates were statistically significant with a p value of 0.02 over the 2-year period and 0.05 over the 18-month period”</p>	Predicted recon. Rate Actual recon. N	2 years 63.8% 49.0% 49	18 months 56.86% 44.44% 63	<p>Results of the study as reported by authors?</p>
Predicted recon. Rate Actual recon. N						
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Item	Study Information	Outcome Measure	Results reported by author
Patrick, S; Marsh, R (2005) Juvenile Diversion: Results of a 3-Year Experimental Study	Country where intervention carried out United States of America	Measure of recidivism used Not stated/unclear	<p>Results of the study as reported by authors? See table 3 (p67) and table 4 (p68)</p> <p>'More interesting, during the 3 years, 56.7% of these first-time offenders did not recidivate at all. Of those that did recidivate most, 32.4%, recidivated three times or less. Just more than 1% recidivated 10 times or more during these 3 years indicating that they were chronic offenders.' (p67)</p>
Ryan, J P; Davis, R K; Yang, H (May 2001) Reintegration services and the likelihood of adult imprisonment: a longitudinal study of adjudicated delinquents	Country where intervention carried out United States of America	Length of follow-up to outcome 24 Months + 2 to 3 year tracking period (p65)	<p>Results of the study as reported by authors? "Of the 291 residential graduates, 24% were imprisoned compared to 39% of the 106 nongraduates. The 5 most frequently committed offenses were assault, breaking and entering, controlled substances, weapon violations, and robbery (armed and unarmed)"</p> <p>"Youths graduating and entering Starr's continuum are less likely to be incarcerated as adults. The odds of imprisonment decrease by a factor of .40 for continuum youth. There is no significant difference in the odds of imprisonment when comparing nongraduates with the graduates returning home and the graduates placed with another agency"</p> <p>"Graduating (i.e. satisfying treatment goals/objectives) and entering Starr's continuum decreases the hazard ratio by approximately 52% compared to nongraduates"</p> <p>"Overall, (hazard ratio) rates are consistently higher for nongraduates compared with continuum youth. For nongraduates, rates of reoffending begin to increase almost immediately following residential release and remain consistently higher for the next 42 months. For continuum youth, hazard ratios remain relatively and consistently low for the first 18 months and then experience a sudden increase between 18 and 24 months. Immediately following this period of increased risk, offense rates drastically plummet and remain below .05 for the next 2 years."</p> <p>Logistic regression predicting the odds of adult imprisonment, and time to re-offence; being a treatment graduate and accessing Starr Commonwealth care significantly reduced the odds of imprisonment and lengthened the time to re-offence when compared with treatment non-graduates, $p < .01$.</p> <p>None of the other treatment combinations performed better than the treatment non-graduates.</p>

Item	Study Information	Outcome Measure	Results reported by author
Scott KK, Tepas JJ, Frykberg E, Taylor PM, Plotkin AJ (2002) Turning point: rethinking violence--evaluation of program efficacy in reducing adolescent violent crime recidivism.	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Guilty sentence (Adjudication)</p> <p>Length of follow-up to outcome 12-24 Months <i>one year after completions of the program</i></p>	<p>Results of the study as reported by authors?</p> <p>The study group revealed an overall recidivism rate of 0.05 within the year after completion of the TPRV program, whereas the control group revealed a recidivism rate of 0.33 within the year after the first violent offense ($p < 0.05$) the lower recidivism in the study group occurred with a shorter overall time investment (14 core contact hours vs. 100 community service hours)</p>
Vignaendra S, Fitzgerald J (2006) Reoffending among young people cautioned by police or who participated in a youth justice conference	<p>Country where intervention carried out Australia</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Court appearance</p> <p>Length of follow-up to outcome 24 months+ 5 years</p>	<p>Results of the study as reported by authors?</p> <p>Of the young people who received a police caution for the first time in 1999, 42 per cent reoffended within five years.</p> <p>The proportion of conference participants who reoffended was 58 per cent.</p> <p>The rates of reoffending for young people cautioned or conference for the first time in 1999 appear to be lower than those for young people who appeared in Children's court for the first time prior to the availability of these diversionary options.</p> <p>...The results of the present study, however, compared less favourably with those reported by Dennisons et al. (2006) in Queensland. They found that 31 per cent of young people born in 1984 who were cautioned had appeared in court before the age of 17 Dennison et al. however did not track subjects into adulthood and the study had a shorter than average follow up period than in the present study...</p> <p>The reoffending rate for the conference cohort in the present study is approximately 20 percentage points higher than the rate for young people referred to a conference in the Luke and Lind Study...</p> <p>The rate of reoffending among the conference cohort in the present study is higher than but not necessarily inconsistent (due to the longer follow up period) with, that reported in South Australia, where 21 per cent of conference participants without priors were found to reoffend within eight to twelve months</p>

Item	Study Information	Outcome Measure	Results reported by author
Weisz, Victoria; Lott, Roger C.; Thai, Nghi D. (2002) A Teen Court evaluation with a therapeutic jurisprudence perspective. [References].	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism Court appearance charge</p> <p>Length of follow-up to outcome 12-24 Months</p> <p>Re-offense rates of the defendants was assessed approximately one year after the first Teen Court appearance</p>	<p>Results of the study as reported by authors?</p> <p>RESULTS Analyses involving pre- and post- (or time 1 and time 2) comparisons were conducted on data from those participants who provided both sets of data.</p> <p>Re-Offending An examination of the records of the County Attorney's office showed that about 13% of the teens that had entered the program had re-offended within a year. Of that 13%, 3% began the program but did not finish their sentences. The other 10% completed the Teen Court program and re-offended within one year of their sentence completion. This compares with an approximate 24% re-offense rate for the entire diversion program in the same county. The Diversion Program data did not separate out the types of Diversion Program. Teen Court was one of the diversion programs included in the 24% rate.</p>
Welsh WN, Jenkins PH, Harris PW (1999) Reducing minority overrepresentation in juvenile justice: results of community-based delinquency prevention in Harrisburg	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>For data used to calculate effect sizes</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Arrest</p> <p>Length of follow-up to outcome 12-24 months</p> <p>Follow-up periods of one and two years after program completion were examined.</p>	<p>Results of the study as reported by authors?</p> <p>The overall recidivism rate for the 1992-93 cohort during the two-year follow-up period was 40.3 percent (77 out of 191 clients had one or more arrests subsequent to participating in the program). Using the three comparison groups formed on the basis of clients' program exposure (none, low, or high), we examined previous arrest records and recidivism rates. Univariate results showed a strong relation between degree of program exposure and overall recidivism for the three-year follow-up period, $F(2) = 9.1$, $p < .01$, with recidivism highest for the control group (50.6 percent), next highest for the low-attendance group (41.3 percent), and lowest for the high-attendance group (25.8 percent).</p>

Item	Study Information	Outcome Measure	Results reported by author
Youngbauer, John Gerard. (1998) The teaching-family model and treatment durability: Assessing generalization using survival analysis techniques.	<p>Country where intervention carried out United States of America</p> <p>Maryland score Level 3</p> <p>Overall weight of evidence Low</p>	<p>Measure of recidivism used Arrest</p> <p>Duration between program exit and first arrest charge</p> <p>Number of arrests</p> <p>Length of follow-up to outcome 24 months+</p>	<p>Results of the study as reported by authors?</p> <p>“There were no significant differences between Teaching Family Model (TFM) and Non-Teaching Family Model (NTFM) youths on the frequency of post-treatment offenses”</p> <p>“Overall, youths from TFM programs had fewer charges than comparison youths over time. In the 27 intervals in which charges were filed, NTFM youths had more charges than TFM youths in 15 of the intervals. In 8 of the intervals, TFM youths had more charges than NTFM youths and the remaining 8 intervals were tied”</p> <p>“Of the calculated variables cumulative survival percent by month is consistently higher for TFM youths than NTFM youths”</p> <p>“After 6 iterations two variables were found to significantly relate to post-treatment survival time: sex and social skills at exit”</p> <p>Maximum length of follow-up = 36 months post-treatment</p> <p>“The overall results suggest that youths assigned to the Teaching-Family homes were better prepared to avoid occasions of risk as determined by significantly better survival rates (significantly fewer post-treatment offense charges across the risk period) than were the comparison</p>

The results of this systematic review are available in three formats:

**REPORT
SUMMARY**

Explains the purpose of the review and the main messages from the research evidence

**TECHNICAL
REPORT**

Includes the background, main findings, and full technical details of the review

DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at
<http://eppi.ioe.ac.uk/reel>

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