

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

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

REPORT SUMMARY

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

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**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

DCSF	Department for Children, Schools and Families
DfES	Department for Education and Skills
EPPI-Centre	Evidence for Policy and Practice Information and Co-ordinating Centre
EYS	Extended Year Schedule
YRE	Year Round Education / Schooling

About this report

This is a summary 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 selected interventions in reducing juvenile re-offending. Details about the process of completing this work and the studies included in the review can be found in the full technical report (Newman et al 2012).

What do we want to know and why do we want to know it ?

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.

Policymakers and practitioners need valid reliable evidence about potentially effective interventions that may reduce the rate of re-offending.

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 as an aid to policy making.

The review question specified by the Ministry of Justice was:

Do criminal justice/ correctional services interventions for juvenile offenders lead to a reduction in offending (including frequency and severity of offending)?

What did we find out?

Search and selection results

The search for the period 1998-2007 identified 10,433 studies for screening. After screening 26 papers reporting 29 studies were included in the in-depth review of pre-sentencing interventions. The interventions (i.e. what was done to or for the offender) in these studies were grouped into two distinct categories:

- Pre-sentencing or diversion interventions - 17 Studies reported in 14 papers

This type of intervention takes place after an offender has been found guilty of an offence (this may include a guilty plea) but before they formally enter into the Criminal Justice System for sentencing, hence the pre-sentencing label.

- Post-sentencing interventions - 12 Studies in 12 papers

Interventions in this category take place either as a direct part of a sentence or after a sentence has been passed.

Synthesis findings

The findings from the studies were converted into a common effect size metric to allow comparison between and across studies. Within the categories pre & post sentencing common groups of interventions and offenders were identified and patterns in effect sizes explored. Where a grouping included one or more medium or high quality study a pooled effect size estimate was calculated by meta-analysis. An interpretation framework was developed to summarize the results of the analysis. These results are shown in table 1 below.

Table 1: Results interpretation summary

<p><i>Positive effects consistent evidence</i></p> <ul style="list-style-type: none"> • Pre-sentencing diversion <ul style="list-style-type: none"> ◦ Personal skill straining. Plus for first time offenders compared to standard diversion (Caution & monitoring) (Two medium, one high quality studies, USA) • Post sentencing <ul style="list-style-type: none"> ◦ Community based family residential placement compared to standard residential placement for female juvenile offenders (One medium, one low quality study, USA)
<p><i>Promising effects (positive or negative) limited or inconsistent evidence</i></p> <ul style="list-style-type: none"> • ‘Teen Courts’ compared to other diversion (One medium, five low quality studies, USA) • Community based family residential placements compared to standard residential placements for male juvenile offenders (One medium, two low quality studies, USA)
<p><i>Insufficient evidence</i></p> <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 • Multi-component diversion for mixed groups of offence severity • 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

Implications for policy and practice

Further implication for policy and practice may be relevant for intervention in the 'Positive effects consistent evidence' category. However some caution is required as the number of studies is small and effect sizes within a range that could be due to measurement error. Furthermore all the studies in this category 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. The results obtained from these interventions will need to be compared to those from other interventions for juvenile offenders that have been the subject of systematic reviews.

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

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.

Community family residential placement for female offenders

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'.

Implications for research

It is argued that the interventions in the 'promising results' category should be priorities for further high quality evaluations.

These evaluations should be conducted high quality experimental (preferably randomised) study designs. Evaluators should be required to report in full the detail of the experimental and control group interventions. Careful consideration will be needed to help give priority to important study design factors such as ensuring intervention and control groups are comparable.

How did we find out?

The systematic review followed a standardised systematic review process designed to minimise bias in the identification, selection, coding and synthesis of primary studies. Quality assurance mechanisms were used throughout the review process to ensure rigour and consistency between review team members (see Appendix 2 for summary of the systematic review process).

The potentially relevant studies identified by the searching process were screened against a set of exclusion criteria designed to facilitate the systematic selection of only the relevant high quality studies (see Appendix 3 for the selection criteria).

The quality of the selected studies were rated using the Maryland Scientific Measurement Scale (Farrington et al 2002) and the Home Office Quality Assessment (Harper and Chitty 2004) tool to create a Weight of Evidence (WoE) rating.

Synthesis investigated the pattern of results in the primary studies by type of intervention, type of recidivism measure and quality of study.

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Appendix 1: Authorship of this report

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Appendix 2: The standard EPPI-Centre systematic review process

What is a systematic review?

A systematic review is a piece of research following standard methods and stages (see figure 1). A review seeks to bring together and ‘pool’ the findings of primary research to answer a particular review question, taking steps to reduce hidden bias and ‘error’ at all stages of the review. The review process is designed to ensure that the product is accountable, replicable, updateable and sustainable. The systematic review approach can be used to answer any kind of review question. Clarity is needed about the question, why it is being asked and by whom, and how it will be answered. The review is carried out by a review team/group. EPPI-Centre staff provide training, support and quality assurance to the review team.

Stages and procedures in a standard EPPI-Centre Review

- Formulate review question and develop protocol
- Define studies to be included with inclusion criteria
- Search for studies - a systematic search strategy including multiple sources is used
- Screen studies for inclusion
 - o Inclusion criteria should be specified in the review protocol
 - o All identified studies should be screened against the inclusion criteria
 - o The results of screening (number of studies excluded under each criterion) should be reported
- Describe studies (keywording and/or in-depth data extraction)
 - o Bibliographic and review management data on individual studies
 - o Descriptive information on each study
 - o The results or findings of each study
 - o Information necessary to assess the quality of the individual studies

At this stage the review question may be further focused and additional inclusion criteria applied to select studies for an 'in-depth' review.

- Assess study quality (and relevance)
 - o A judgement is made by the review team about the quality and relevance of studies included in the review
 - o The criteria used to make such judgements should be transparent and systematically applied
- Synthesise findings
 - o The results of individual studies are brought together to answer the review question(s)
 - o A variety of approaches can be used to synthesise the results. The approach used should be appropriate to the review question and studies in the review
 - o The review team interpret the findings and draw conclusions implications from them

Quality assurance (QA) can check the execution of the methods of the review, just as in primary research, such as:

- Internal QA: individual reviewer competence; moderation; double coding
- External QA: audit/editorial process; moderation; double coding
- Peer referee of: protocol; draft report; published report feedback
- Editorial function for report: by review specialist; peer review; non-peer review

Appendix 3: Exclusion Criteria used in this review

Exclude

- Not published in English
- Published before 1998
- Does not report an evaluation of an intervention
- Subjects not offenders or in the care of the Criminal Justice System
- Participants aged over 18 years of age. Where studies contain overlapping samples (e.g. 15-25 years) these will be considered for inclusion.
- Is a review or over-view article
- No measure of recidivism
- Intervention type 1 - must not relate to 'Scared Straight and other Juvenile Awareness Programmes
- Intervention type 2 - 'Boot Camps' or related interventions
- Intervention type 3 - focused on the family of the offender
- Intervention type 4 - non-custodial employment programme
- Intervention type 5 - cognitive behavioural therapy
- Intervention type 6 - an intervention targeted at gang members or reducing gang related violence
- Intervention type 7 - an intervention aimed to improve the organization and management of the Criminal Justice system
- Intervention type 8 - solely a restorative justice intervention
- Intervention type 9 - an intervention targeting dealing with offenders drug or alcohol problems only
- Intervention type 10 - an intervention targeting specific health problems only
- Intervention type 11 - an intervention that specifically target sex offenders
- Intervention type 12 - an intervention that specifically aims to change sentencing practices or legal representation for offenders
- Study design does not include a control group. (Scores 1 or 2 on the Scientific Methods (Maryland) scale

Appendix 4: Interpretation framework

‘Showing positive outcomes’: Any intervention summarized as showing ‘positive’ 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] that is statistically significant

‘Showing negative outcomes’: Any intervention summarized as showing ‘negative outcomes’ must 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 comparison group] that is statistically significant

‘Showing promising outcomes:’ Any intervention summarized as ‘promising’ will have one¹ or more studies 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] that is not statistically significant

OR

One study at level 4/5 on the SMS scale with medium / high score on WOE framework that has a positive effect size favouring the intervention which is not statistically significant AND is where there are no contradictory results from the other studies of the same intervention

‘Showing not promising outcomes:’ Any intervention summarized as ‘not promising’ will have one¹ or more studies 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 comparison group] that is not statistically significant

OR

One study at level 4/5 on the SMS scale with medium / high score on WOE framework that has a positive effect size favouring the intervention which is not statistically significant AND is where there are no contradictory results from the other studies of the same intervention

¹ If there is only one study it should be Multi-centre Randomised Controlled Trial

² Where weighted mean summary effect size used studies must meet the requirements for statistical homogeneity.

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The EPPI-Centre was established in 1993 to address the need for a systematic approach to the organisation and review of evidence-based work on social interventions. The work and publications of the Centre engage health and education policy makers, practitioners and service users in discussions about how researchers can make their work more relevant and how to use research findings.

Founded in 1990, the Social Science Research Unit (SSRU) is based at the Institute of Education, University of London. Our mission is to engage in and otherwise promote rigorous, ethical and participative social research as well as to support evidence-informed public policy and practice across a range of domains including education, health and welfare, guided by a concern for human rights, social justice and the development of human potential.

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