Searching for ‘What Works’: an evaluation of cognitive skills programmes

Louise Falshaw, Caroline Friendship, Rosie Travers and Francis Nugent

Studies of cognitive skills programmes have shown they are effective in altering offenders’ attitudes and behaviour and that they can reduce reconviction by up to ten percentage points. However, the evaluation reported here found no difference between the two-year reconviction rates for a sample of adult male prisoners who had participated in a programme during the evaluation period of 1996 to 1998 and a matched group of offenders who had not. This was in contrast to a recently published prison-based evaluation (Friendship et al., 2002) which covered the period 1992 to 1996. Explanations for the current results are discussed; in particular, why they should not be taken as evidence that these programmes are ineffective.

Key points

- This evaluation found no differences in the two-year reconviction rates for prisoners who had participated in a cognitive skills programme between 1996–1998 and a matched comparison group. This contrasts with the reduction in reconviction shown in the previous evaluation of cognitive skills programmes for prisoners, delivered between 1992–1996.

- Explanations for this current finding are:
  - these results may merely reflect expected variation - international experience mirrors the variable reductions in reconviction rates found so far in the evaluation of prison-based cognitive skills programmes
  - the positive results of the earlier evaluation of these programmes may have arisen because the staff running the programme and the prisoners that participated were highly motivated
  - the current evaluation relates to a period when programmes were rapidly expanded and this may have affected the quality of programme delivery
  - the treatment and comparison group members could differ on dynamic risk factors which were not assessed in the course of this study (such as attitudes to offending and motivation to change)
  - there is evidence, from the previous to the current study, of a shift in programme targeting towards lower risk offenders. Whilst this does not explain the results, it does suggest that there is a drift in selecting prisoners for programmes.

- The Prison Service has been responsible for translating broad academic ‘What Works’ principles into large-scale practice. Programmes have been developed on current evidence but there are still gaps in our understanding of ‘What Works’ in practice – in particular, ‘What Works with whom’? Future research is planned to bridge these gaps.

Cognitive skills programmes are a specific type of cognitive behavioural intervention, sometimes referred to as ‘thinking skills’ programmes. These operate on the assumption that offenders lack the appropriate cognitive skills to achieve their goals in a pro-social way. Programmes seek to address this deficit by teaching new ways of thinking, mainly through skills practice.
Treatment programmes for offenders in custody were introduced into HM Prison Service in England and Wales in 1992. Two cognitive skills programmes were introduced around this time, namely Reasoning and Rehabilitation (R&R) in 1992 and Thinking Skills, later known as Enhanced Thinking Skills (ETS), in 1993.

Meta analytical studies have shown that some interventions with offenders can produce a small but statistically significant reduction in recidivism (McGuire, 2000). Among the various forms of intervention that have been examined, cognitive behavioural approaches to treatment have produced the most promising results (Vennard, Hedderman and Sugg, 1997). Although these programmes have been shown to be effective, evidence suggests that their impact is contingent on the way that they are delivered and to whom they are delivered, e.g. offender's level of risk (Bonta, 2002). To address this, the Prison Service set up an expert accreditation panel with independent members in 1996. These were replaced with the Joint Prison/Probation Accreditation Panel in 1999 (recently renamed the Correctional Services Accreditation Panel). These bodies regulate the theory behind a programme and programme delivery.

Programme evaluation to date has retrospectively matched adult male offenders who had participated in treatment to comparison group offenders who were similar in terms of a number of static risk factors, e.g. year of discharge, offence type and sentence length (see Friendship et al., 2002). This is standard practice in evaluation but is not ideal. It relies on available information recorded for operational purposes. Using this approach means it is not possible to compare the treatment and comparison group in terms of dynamic risk factors. Whilst a Random Control Trial would overcome these problems, they do present some practical and ethical difficulties.

The current sample
The treatment group consisted of 649 adult male offenders who had voluntarily participated in an accredited prison-based cognitive skills programme (either R&R or ETS), between 1996 and 1998 (i.e., immediately after accreditation was introduced). Participants who began but failed to complete treatment were included (10% of the treatment sample). The comparison group consisted of 1,947 adult male offenders who had not participated in a cognitive skills programme during their custodial sentence. All offenders had received a custodial sentence of six months or more, but less than life, and at least two years had passed following their discharge from prison.

The comparison group was identified using the Prison Service central computer. Three comparison group offenders were randomly selected for every one treatment group offender. They were chosen on the basis of their match to the treatment group offender on relevant variables. They were also classified into four risk groups.

### Variables
- ethnicity: white, black, Asian and other
- sentence length: less than 12 months, 12 months to two years, two to four years and four years or more
- offence type: violent, sexual, acquisitive and other
- risk of reconviction: low risk, medium-low risk, medium-high risk and high risk.

### Risk groups
The Offender Group Reconviction Scale Revised (OGRS), see Taylor (1999), estimates (from a number of demographic and criminal history factors) the probability that an offender will be reconvicted of an offence within two years of discharge from custody or from the beginning of a community sentence. The risk score (0 to 100%) was split into quartiles:
- low risk equated to a risk score between 0 and 25%
- medium-low risk – a score between 25 and 50%
- medium-high risk – a score between 50 and 75%
- high risk – between 75 and 100%.

Conviction data was obtained for treatment and comparison group offenders from the Offenders’ Index, a Home Office database. From this, expected reconviction rates were calculated for the sample using OGRS. Actual two-year reconviction rates were also calculated. Treatment impact was examined by comparing actual reconviction rates between the treatment and comparison group.

### Treatment impact
The expected reconviction rates were similar for both the treatment and comparison group (see Table 1). To this extent the samples were well matched.

<table>
<thead>
<tr>
<th>Risk level (OGRS)</th>
<th>Treatment group</th>
<th>Comparison group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Low</td>
<td>153</td>
<td>14.8</td>
</tr>
<tr>
<td>Medium-low</td>
<td>157</td>
<td>37.9</td>
</tr>
<tr>
<td>Medium-high</td>
<td>166</td>
<td>64.1</td>
</tr>
<tr>
<td>High</td>
<td>173</td>
<td>85.4</td>
</tr>
</tbody>
</table>
Table 2  Observed two-year reconviction rates for the treatment (n=649) and matched comparison groups (n=1,947) by risk category

<table>
<thead>
<tr>
<th>Risk level (OGRS)</th>
<th>Treatment group observed reconviction rate</th>
<th>Comparison group observed reconviction rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Low</td>
<td>8</td>
<td>5.2</td>
</tr>
<tr>
<td>Medium-low</td>
<td>34</td>
<td>21.7</td>
</tr>
<tr>
<td>Medium-high</td>
<td>87</td>
<td>52.4</td>
</tr>
<tr>
<td>High</td>
<td>127</td>
<td>73.4</td>
</tr>
</tbody>
</table>

The actual two-year reconviction rates for the treatment and comparison group offenders, within each risk category, are shown in Table 2.

There were no significant differences in reconviction rates between the treatment and comparison groups in any of the risk bands. The greatest reduction in the rate of reconviction was found for treatment offenders in the medium-low risk category (2.9 percentage points less than for the comparison group). The treatment group showed a reduction in reconviction in all risk bands except the medium–high risk category. These results were unexpected because an earlier evaluation of the same programme for the period 1992–1996 (before accreditation) had shown that treated offenders had lower reconviction rates than matched comparisons in all risk groups (Friendship et al., 2002). Further analysis was undertaken but none of the factors considered produced any significant results.

Factors included in further analysis

- Dropouts were excluded from the treatment group as they have, in some studies, shown higher reconviction rates than both the treatment and comparison group.
- Time between treatment completion and release may influence the impact of the programme. The treatment group was separated in two ways: less than 12 months and 12 months or more between treatment completion and release; and less than six months and six months or more between treatment completion and release.
- Programme participants from prisons which failed site audit were excluded to examine whether the quality of programme delivery has an impact on treatment outcome. Prisons running programmes are audited annually to assess programme delivery.
- The first 100 and last 100 treatment participants were examined to see if programmes delivered at the start of accreditation differed in impact to those delivered later.
- ETS and R&R were examined separately to determine any differential programme impact.
- Time to first reconviction was assessed to see if treatment participation led to a delay in acquiring a reconviction.
- Frequency of reconviction was assessed to examine whether treatment participation lowered the frequency at which offenders were convicted.

For the current study, prisons which failed their audit were excluded but when this was taken into account it did not reduce the reconviction rate of the treatment group.

Possible reasons for results

Variability of evaluation results

Recent international experience of evaluating offender programmes shows that reductions in reconviction rates are extremely variable (e.g. Bonta, 2002) and that variability is to be expected.

Staff and offender motivation

Whilst the early cognitive skills programmes adhered to 'What Works' research evidence, the introduction of accreditation of prison cognitive skills programmes was expected to improve the quality of programme delivery and therefore effectiveness. It could be argued that the high level of motivation shown by staff who volunteered to deliver the early programmes had an impact on the initial evaluation results.

In addition, offenders volunteering to attend a cognitive skills programme prior to accreditation were probably highly motivated to change – attendance was not part of an offender’s sentence plan and was less likely to influence early release from custody. From 1996, whilst attendance remained voluntary, offenders were aware that their non-attendance could adversely affect their chances of early release. Therefore, while current participants may be motivated to attend a programme, they may not necessarily be equally as motivated to actual change.

Expansion of programme delivery

In contrast with the previous evaluation study, this research related to a period of rapid expansion in the implementation of cognitive skills programmes in prisons. This resulted in a substantial increase in the number of prison sites delivering the programme and the number of programme completions. For 1995–1996 (part of the earlier evaluation study), 30 establishments supported cognitive skills programmes with 746 programme completions. In contrast, for the period 1998–1999 (part of the current study period), 72 prisons delivered programmes with 2,837 completions. There is little published evidence available on the effect of large scale expansion but speculation among experts suggests that treatment quality might be compromised (Gendreau et al., 1999).
Matching of the comparison group

In contrast to the previous evaluation, there were no significant differences between the treatment and comparison groups on relevant static risk factors in this study. This closer match between the two groups may have eliminated the impact of the programme. However, whilst the current groups of offenders were well matched on a small number of static risk factors they could differ on dynamic risk factors. These include level of thinking skills and motivation to change as well as other dynamic risk factors relevant on release such as housing, employment and drug use.

Targeting offenders to treatment

The distribution of risk level in programme participants differed between the current and previous study. The current study had a higher proportion of low risk offenders and a lower proportion of high risk offenders. This suggests there has been a shift in programme targeting towards lower risk offenders. The proportion of medium-low and medium-high risk level offenders remained the same between the two studies and it is in these medium risk groups where treatment is expected to have the most impact. On balance, it was thought that this shift would not have affected the results of the current study.

What Works with whom?

This evaluation assumes that all offenders who participated in the programme (the treatment group) responded equally. However, research has shown that offenders differ in the way they respond to treatment (McGuire, 2000). Identifying which offenders have benefited most from a programme would help to improve the quality of evaluation research (Friendship et al., 2003) and help the Prison Service answer ‘What Works with whom?’.

Conclusions

The ‘What Works’ literature recommends basic principles that govern effective treatment. HM Prison Service has been responsible for translating these broad academic principles into large-scale practice. As there is no specific blueprint, programmes have been developed on current evidence and, as such, need to be seen as exploratory in terms of identifying ‘What Works’ with offenders. This study found no difference between the two-year reconviction rates for a sample of adult male prisoners who had participated in a programme and a matched group of offenders who had not. A range of explanations for these results has been discussed and further research is needed before assessing whether these programmes work.

Future research is aimed at bridging current gaps in our understanding of ‘What Works’ in practice:

- A process evaluation is planned to assess the theory that the rapid expansion of programmes has led to implementation failure in terms of reduced quality of programme delivery
- Research is planned to investigate ‘What Works with whom’ by monitoring the changes an offender makes during programme participation. The characteristics of offenders who make the most progress will be identified.

References


A fuller report has been written for peer-review publication, for further details contact Caroline Friendship, Room 411, Horseferry House, Dean Ryle Street, London SW1P 2AW.

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