

# Summary

## What works in the Netherlands and what doesn't?

### *A meta-analysis of Dutch recidivism research into the effects of criminal justice interventions*

The international 'what works' approach involves the use of targeted, empirical research as a way of identifying the conditions under which social interventions can be successful. In the Netherlands interventions within the criminal justice system intended to reduce recidivism have become grounded on the what works-principles. The Accreditation Panel for Behavioural Programmes (*Erkenningscommissie Gedragsinterventies Justitie, EGJ*) examine proposals for the application of interventions in a criminal justice context. This group of experts assesses the training and treatment programmes in terms of their potential for success. Since early 2005, more than 46 behavioural interventions have been assessed in this way, half of which have been accredited. In most cases, research into the effects of these programmes is still pending. In the next few years, it will become clear whether the interventions have lived up to their promises.

The insights on effective intervening are derived from international reviews and meta-analyses. Within the Netherlands itself, relatively little is known about the effects of criminal justice interventions. Recidivism studies have been conducted in the past, but generally on a small scale, and up until now the research has failed to present conclusive findings. In order to obtain an overview of the current situation in this area, the Research and Documentation Centre (WODC) has conducted a meta-analysis of all the comparative impact studies available in the Dutch language area – Netherlands and Flanders. The meta-analysis was conducted in accordance with the guidelines of the Campbell Collaboration. Up to 1 July 2011, 141 empirical studies were identified that meet the selection criteria. In these studies, statistics on reoffending are used as a basis for drawing conclusions on the effectiveness of one or more criminal justice interventions. The interventions studied vary in type: they include research into local, experimental treatment programmes for specific groups of adults or young offenders, as well as nationwide studies into the outcomes achieved by different types of sentencing, such as custodial sentences, community service and fines. The quality of the research equally varied. A control group was used to compare with the results in the experimental group in only 83 of the studies. These were included in the meta-analysis. 53 of the 83 studies with a control group showed a positive difference; which means that the level of reoffending in the experimental group was lower than it was in the control group. The difference was statistically significant in 26 of these studies. A total of 18 of the studies reviewed showed a negative difference. In these cases, the prevalence of reoffending in the experimental group was seen to be significantly higher than in the control group, suggesting that the effect of the intervention was counter-productive.

The meta-analysis revealed a number of correlations. In 'grey' literature, such as theses and regional research reports, fewer positive differences were generally reported between the experimental and control group than in studies published through official channels. This may be a manifestation of the well-known 'file drawer problem': studies of which the outcome is less appealing, are less likely to be published.

Aspects of methodology are also of importance. If a good outcome measure was used for the level of reoffending and dropped out participants were included in the research, the result of the study was less likely to be positive. This is an indication that the quality of the research can be instrumental in the determination of the result. The design of the study needs to meet specific requirements to avoid drawing incorrect conclusions from the measurement results. This is relevant for current and future research, as well.

This meta-analysis has delivered two important substantive results. Irrespective of all other correlations identified, interventions targeted at adults seem to have been more successful in the Netherlands than programmes designed for other age groups. The reason for this is unclear and will need further research. The second result is that, over the years, projects based on the principle of 'rehabilitation' have shown better results than sanctions focussing on 'deterrence'. This was revealed by our review. Taking account of differences in terms of other variables, interventions based on treatment and/or support had positive effects more often than interventions based on repression. As such, these results are nothing new. The international 'what works' reviews have previously demonstrated that if programmes are tailored to meet the criminogenic needs of the offenders involved, certain criminal justice interventions can result in reduced reoffending.<sup>24</sup> Our review shows that attempts at rehabilitation can also be effective in Holland and Flandres. As the results show, programmes focusing on the support or treatment of offenders have, in the last 45 years, been more successful in reducing reoffending than interventions based on repression.

No clear explanation emerges from the meta-analysis for the relative success of rehabilitation projects. The distinction drawn between rehabilitation and deterrence is only an initial, very broad categorisation of the studied

24 See for example Gendreau, P. & Ross, R.R. (1979). *Effective correctional treatment: Bibliotherapy for cynics*. *Crime and Delinquency*, 25, 463-489; Cullen, F.T. & Gilbert, K.E. (1982). *Reaffirming rehabilitation*. Cincinnati, OH: Anderson Publication Company; Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P. & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28(3), 369-404; McGuire, J. (2000). *What works in reducing criminality?* Perth: Australian Institute of Criminology; MacKenzie, D.L. (2002). Reducing the criminal activities of known offenders and delinquents: Crime prevention in the courts and corrections. In L.W. Sherman, D.P. Farrington, B.C. Welsh & D.L. MacKenzie (red.), *Evidence-based crime prevention*. London/New York: Routledge; Andrews, D.A., & Bonta, J. (1994). *The psychology of criminal conduct*. Cincinnati, OH: Anderson Publishing; Mackenzie, D.L. (2006). *What works in corrections: Reducing the criminal activities of offenders and delinquents*. Cambridge, New York: Cambridge University Press; Parhar, K. P., Wormith, S. W., Derkzen, D. M., & Beauregard, A. M. (2008). Offender coercion in treatment: A meta-analysis of effectiveness. *Criminal Justice and Behaviour*, 35, 1109-1135; Lipsey, M.W., & Wilson, D.B. (2001). *Practical meta-analysis*. Thousand Oaks: Sage. Applied Social Research Methods Series 49.

interventions. The exact nature of the interventions and the context in which the interventions were implemented can only be partially incorporated in the meta-analytical equation. In line with Pawson and Tilley, who have criticized the experimental tradition meta-analyses are used in, it seems reasonable to argue that without additional information it remains unclear which underlying processes determine the success or failure of social interventions.<sup>25</sup> In other words, a meta-analysis is too crude an instrument to reveal the subtle mechanisms that account for the real impact of the sanctions and programmes involved. As a follow-up to the quantitative approach chosen here, part of the studies will be subjected to more detailed analysis in order to examine whether we can discover more about the effective mechanisms that distinguish successful interventions in the Netherlands and Flanders from those that are less successful. Theoretically, the interventions with favourable outcomes are the ones that most reflect the basic principles of the 'what works' approach, such as alignment with the risk of recidivism among offenders, the focus on their criminogenic factors, differences in responsivity, a systematic and consistent implementation, multimodality and the presence of after-care.<sup>26</sup> A follow-up study will investigate in more detail whether the 'what works' ideas are corroborated in the Dutch language area.

A further qualification concerns the representativeness of the research material. The database on which the meta-analysis was conducted is part of the Knowledge Base on Crime Prevention (*Kennisbank Criminaliteitspreventie*) which is currently being developed by the WODC. In order to keep this website up-to-date, new studies will be periodically added to the database. The meta-analysis described in this document covers publications that appeared before 1 July 2011. Although intensive and repeated attempts have been made to find studies that meet the selection criteria, we cannot guarantee that the database is comprehensive. By publishing this report, we hope to be able to add the studies that are still missing. We would therefore ask anybody who is aware of such potential studies to contact us directly.<sup>27</sup> We believe that there must be other Flemish studies available. It is also possible that we have overlooked several recent studies, and there could be even more 'grey' literature in this area than has so far been discovered. Indeed, the latter possibility still has the potential to skew the outcome of the meta-analysis, because it has been seen that non-published studies are, on the whole, likely to show less spectacular results. If a number of studies with non-significant differences were to be added to the database, it is possible that the positive impact shown for rehabilitation projects would disappear as a result. The same applies for the other results. The meta-analysis was limited to studies in which the prevalence of recidivism served as a key outcome. No

25 Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London: Sage.

26 See Andrews, D.A. (2001). Principles of effective correctional programs. In L.L. Motiuk & R.C. Serin (ed.), *Compendium 2000 on effective correctional programming* (pp. 9-17). Ontario: Correctional Service Canada.

27 This can be done using this mail address: RecidivemonitorWODC@minvenj.nl.

analyses have yet been conducted in which the frequency or seriousness of reoffending was the dependent variable, or any other outcome variable for that matter. It remains to be seen whether the difference between the effects of interventions for adults and those for young offenders is equally evident if the number of new offences committed by offenders after the intervention is also taken into account. An intervention can also be successful if it manages to limit the extent of reoffending. It may be that the effect of the interventions on young offenders is less easy to measure in terms of whether or not such interventions manage to prevent all future offending behaviour.

We should also remember that this review focuses on only one of the objectives of sentencing. When considering whether a sanction 'works', one is bound to think in terms of special prevention. However, there are other sentencing goals such as retribution, restitution and general prevention. These latter objectives cannot be measured in terms of recidivism by the offender. So, the effectiveness of criminal justice interventions cannot be attributed completely to the extent to which criminals reoffend. Consequently, if this meta-analysis suggests that rehabilitation programs generally score better than sanctions based on deterrence, this does not necessarily mean that the latter are less effective. What it does mean, is that it appears that they are less effective in terms of special prevention which is the reduction of the occurrence of reoffending behavior.

Finally, the quality of the evaluation research conducted is a relevant factor. We now know that research on reoffending has been conducted for more than forty years in the Dutch speaking area. The review shows that not all the studies conducted meet the obvious requirements with regard to methodology. Our impression is that, in some of the studies, the figures on reoffending were little more than subsidiary, almost incidental, findings. New programs executed on a small scale and on an experimental basis were followed up by research, but this was generally only done during a preliminary phase. The research period was deliberately kept short in order to enable rapid decision-making. What followed was an evaluation of the process, in which the design or set-up of the project was scrutinised. Occasionally, this was supplemented by a brief, provisional measurement of reoffending among the initial participants.

The short evaluation period explains why many impact studies can be found which have no control group, have limited numbers of subjects or utilize a less appropriate measure of the outcome variable. It may be worthwhile to examine the results of the meta-analysis if it were limited to the studies that meet specific requirements in terms of design and implementation. Based on the research material available, we would initially suggest to the following inclusion criteria:

- a control group of sufficient similarity (i.e. a 'comparability score' of 2 points or higher);

- an outcome measure that matches the research question (a 'fit score' of 2 or 3 points);
- sample sizes that make it possible to measure an effect that is deemed relevant,
- measurement that also includes individuals who dropped out at an early stage.

Only a minority of the 141 studies selected so far would meet these criteria. In a follow-up to this review, this group will be separated. An investigation will be conducted into the effects shown by these qualified studies, into the correlations that then emerge with the moderators measured, and how this relates to the outcome of the present meta-analysis.

We suppose the quality of the research in the field of criminal law will improve in the coming years. The realisation that effective recidivism research takes time increases, not only among researchers, but also among those who commission the research. Research into the effects of criminal justice interventions nowadays takes place in stages. After the phase in which the design and rationale of the programme is assessed, and the phase of a process evaluation, in which the initial stages of implementation is accompanied by research, the period follows in which the effects of the intervention are measured. This initially relates to the immediate treatment goals (such as the improvement of skills or the regulation of drug use) and only later addresses the issue of recidivism.<sup>28</sup>

The conditions for conducting good evaluative research are improving. In part this is due to the role played by the Accreditation Panel for Behavioural Programmes mentioned earlier. At the request of the minister of Security and Justice this panel scrutinises the plans of agencies such as the Prison Service, the Child Protection Council and the Probation Service. It assesses whether the proposed interventions meet the criterion of 'effective intervening'. A supplementary condition for the accreditation of an intervention is the maintenance of a system of *routine outcome monitoring* (ROM). The agencies must keep records of information on the progress of the project and the achievement of the program objectives. In addition, it is only possible to extend the accredited status if further research shows that the intervention has contributed to the reduction of recidivism. Such research must involve the use of a control group, preferably as part of an experimental design. If it is not possible to allocate potential participants at random, a quasi-experimental design must be applied.<sup>29</sup>

We believe that it is even more important to insist that there is sufficient guarantee that the individuals in the experimental group can be effectively

28 Wartna, B.S.J. (2009). *In de oude fout: Over het meten van recidive en het vaststellen van het succes van strafrechtelijke interventies* [Lapse into old mistakes. Measuring recidivism to help determine the rehabilitative effect of penal interventions]. The Hague: Boom Juridische uitgevers.

29 EGJ (2011). *Criterion 10 of the assessment criteria for the effectiveness of behavioural interventions*. The Hague: Erkenningscommissie Gedragsinterventies Justitie.

compared with those in the control group. Admittedly, this is best achieved by means of a randomised controlled trial (RCT). But the opportunity for establishing an experiment in the Dutch criminal justice field does not arise often. A quasi-experimental design would therefore seem the obvious solution, but this review has shown that the process of matching as such does not guarantee that the participants and the controls can be properly compared. It is the end result of the matching process which is the key issue here. The researchers will need to make clear what efforts have been made to ensure that the groups are indeed comparable.

We would also call for the avoidance of a single measurement of reoffending. Instead, permanent records should be kept on the outcomes achieved by an intervention. This is relatively easy to organise using the Dutch Recidivism Monitor (*Recidivemonitor*). In this project, personal characteristics, key data and justice system documentation are linked together on a large scale and in a way that guarantees anonymity. If it is clear which individuals have been offered which interventions, the level of recidivism for each intervention can be monitored relatively easily and on a permanent basis. The Recidivism Monitor database can also be used to select individuals for control groups. Techniques such as propensity score matching can ensure that these individuals are comparable in terms of key aspects with the individuals subject to the interventions.

The infrastructure for evaluative research is improving and this offers new possibilities. If the establishment of an RCT proves not to be feasible, there are other means to determine the effectiveness of a criminal justice intervention. However, it is important to remain realistic. The Netherlands and Belgium are small countries. Crime is a major social problem, but the number of offenders is relatively low compared to other countries. Especially in the case of interventions intended for specific groups of offenders, it will not always be easy to form random samples within a specific time period that are sufficiently large for effective statistical analysis. Consequently, although the quality of the research will still further increase, we will continue to depend on other countries for our knowledge on the effect of criminal justice interventions. It is therefore important that we carefully monitor what is happening elsewhere and learn from the lessons abroad. This is why international reviews will also be included in the Knowledge Base on Crime Prevention, alongside the Dutch and Flemish impact studies.