

# Summary

## CoVa: think first and then ...?

### Comparative recidivism research CoVa 2008-2011

Since 2004 a cognitive skills training called CoVa can be administered to adult offenders in the Netherlands. The training is an adapted version of the Enhanced Thinking Skills (ETS) program that has been in operation in England for over twenty years. It aims to improve four kinds of cognitive skills: inhibition, perspective taking, problem solving and critical and moral reasoning. As cognitive skills are important factors in explaining criminal behaviour, teaching those skills to offenders can reduce criminal behaviour. The current study examines the effectiveness of CoVa by comparing the reconviction rates of CoVa participants and offenders who did not take the training.

CoVa is accredited in 2007 by the 'Erkenningscommissie Gedragsinterventies Justitie' (Dutch Correctional Services Accreditation Panel for Behavioural Interventions). The guidelines of this commission prescribe that the effectiveness of the program is studied within five years from the start. For this reason, Buysse and Loeff (2012) evaluated the efficacy of CoVa by measuring the cognitive skills before and after the training. As a result of the positive findings, CoVa kept its accreditation for an extended period of three years, provided this period was followed by an estimation of the impact of CoVa on recidivism rates.

In 2015 the accreditation of judicial behavioural interventions has been reorganized. The rules guiding the procedure of accreditation changed. A recidivism study is not compulsory anymore. Of course, the current study remains useful. This is the first study concerning CoVa that adopts a quasi-experimental design to find out whether the CoVa training reaches its final goal: to reduce reoffending by adult offenders.

The CoVa training consists of twenty group sessions of two and a half hour, typically delivered two times a week. The training takes place in- or outside prison. To participate in the CoVa program an offender has to meet the selection criteria. These are based on scores of a screening instrument called the 'RISc' (Recidive Inschattings Schalen – which resembles OASYS). CoVa is developed for offenders having a medium or high measured risk of reoffending. In addition they should have demonstrable cognitive deficits on the Thought Patterns, Behaviour and Skills section of the RISc. If an offender does not meet the RISc selection criteria, but the probation officer thinks he or she suits the program anyway, the offender is allowed to participate if the intervention coach agrees (Ferwerda et al., 2009). Other treatment inclusion criteria are: an age above 18 year, no special psychiatric care, sufficient Dutch language proficiency, a valid residence permit and a remaining sentence duration of at least four months. Contra-indications for participation are addictions or mental problems that obstruct group functioning.

Two previous studies about the efficacy of CoVa showed that several cognitive skills improved after the training (Tierolf, 2007; Buysse & Loeff, 2012). There is no prior research about recidivism of CoVa participants in the Netherlands, but there are several foreign studies about the effectiveness of ETS on reducing reconvictions. These studies have produced mixed results. Some found little or no significant effects whereas others did find significant and large reductions in reconviction. Besides COVA and ETS there are several other cognitive programs. Many meta-analytic studies show that cognitive interventions for adult offenders on average reduce reconvictions.

The research questions of the current study are:

- 1 What are the characteristics of the offenders who participated in CoVa in the period 2008-2011 and to what extent are they comparable to offenders in the control groups?
- 2 How do the reconviction rates of CoVa participants compare to the reconviction rates of similar offenders who did not participate?
- 3 Which execution aspects and progress indicators predict recidivism following CoVa, when the analyses also incorporate offender backgrounds, penal characteristics, treatment history and information on criminogenic needs taken from the RISC screening device?

## **Method**

This research combines data from different sources. The main data source is a file compiled by Buysse & Loeff (2012). This file contains information on training implementation issues, offender backgrounds and scores from measures of cognitive skills before and after the training. We merged these data on an individual level with data from other organizations like the probation, the Judicial Information Service (JustID) and the Dutch National Agency of Correctional Institutions (DJI).

The results of the CoVa participants were compared to those of two control groups. The first was designed by Buysse & Loeff (2012). They selected persons who met the inclusion criteria but did not participate in a training. As one third of the CoVa participants did not meet the inclusion criteria, we anticipated that the first control group was not similar to the CoVa participants. For this reason a second control group was composed using a propensity score matching technique. Control group 2 was matched with the CoVa participants on 31 covariates. These can be grouped into four categories: offender backgrounds, features of the index case, criminal career characteristics, and problem scores on the RISC life domains.

Reconviction rates are measured by using the procedures of the Dutch Recidivism Monitor (Wartna et al., 2011). The data source for reconvictions is the Research and Policy Database Judicial Information ('OBJD'). The use of OBJD data implies that only those crimes that are handled by the Public Prosecutions Service are charted. In this study we examine two aspects of recidivism: prevalence and frequency. The prevalence is the percentage of known repeat offenders in the group. The definition of frequency in this study is: the annual average of new cases over the period that a person was not detained. In addition to prevalence and frequency, we also report on 'recidivism impact'. This outcome measure is a combination of prevalence, frequency and the seriousness of the persecuted offenses.

## Results

The study explored the reconviction rates of 2,229 adult offenders, who attended CoVa between 2008 and 2011. The attrition rate was 20%. In comparison to control group 1, the CoVa participants are younger, less frequently born in Morocco and they committed other types of crimes. Furthermore, the CoVa participants have less extensive criminal careers. Their problem scores were lower than those of the offenders in control group 1 on almost all criminogenic needs measured by the RISC-screening device. On average control group 1 seems to have a higher risk profile than the CoVa participants. For that reason it is not appropriate to make a direct comparison between the reconviction rates. An additional multiple regression analysis is needed to account for the differences in background characteristics. The second control group proved to be comparable to the CoVa participants. There were no differences on 31 relevant static and dynamic background characteristics.

The recidivism research shows that the percentage of recidivists is not statistically significantly lower for CoVa participants than for control group 1. Likewise, the multiple Cox regression indicates that participating in CoVa does not have a significant relation with a lower recidivism prevalence. However, the CoVa participants do seem to have recidivated less frequently than the offenders of control group 1, even if different background characteristics are accounted for. The effect is 'very small' (Cohen, 1988), but it is a fraction larger than the average effect that has been found in a comprehensive meta-analysis of recidivism research on penal interventions in the Netherlands. The recidivism impact does not significantly differ between the CoVa participants and control group 1. This follows from both the direct comparison and the multiple regression.

The comparison between the CoVa participants and control group 2 shows no significant differences on recidivism prevalence and frequency. The recid-

ivism impact, however, is significant lower for the CoVa participants. The effect is again very small, but comparable to effect sizes found in the meta-analysis. In other words, by Dutch standards we have found an average effect.

The multiple regression analysis, which controls for mutual correlations of several static and dynamic background characteristics, shows that there is a significant correlation between completion of the CoVa training and lower recidivism rates. Training implementation issues, such as program integrity or the degree to which participants meet the inclusion criteria, did not correlate significantly with recidivism. Participating to the training in an outpatient setting did not correlate with lower recidivism rates, but there was a significant negative correlation with recidivism frequency and impact. Another multiple regression analysis, in which the progress scores on the cognitive skills were used as independent variables, indicated that a reliable improvement on the ability to solve 'negative problems' concurs with a lower recidivism prevalence. As the intervention theory predicts that improvement of cognitive skills leads to lower reconviction rates, we did not find this relationship on most of the cognitive skills addressed by the CoVa training, presumably because of the measurement problems. About half the participants that started the training did not complete the questionnaires fully or adequately.

## **Conclusion**

The effectiveness of the Dutch CoVa training has been examined with recidivism research for the first time. The comparison of the reconviction rates of participants and members of two control groups leads to weak indications of the effectiveness of CoVa. The effect estimates favor the CoVa on almost every measured outcome, two out of six differences are statistically significant: CoVa participants are less frequently reconvicted than control group 1 members and the recidivism-impact of CoVa participants is lower than the recidivism impact of control group 2 members. Both effects are very small, but comparable to other effect sizes found in the same area in the Netherlands. Additional multiple regression analyses identify two extra indications of effectiveness. Firstly, participants who completed the training recidivated less than comparable participants who failed to complete the training. Secondly, a reliable improvement on the cognitive skill 'negative problem resolving' correlates significantly with lower reconviction rates. Of course, these indications are not conclusive either, for it may be that other, non-measured factors account for these results.

Our conclusion is that although there are some weak indications of program effectiveness, it remains to be proven that the CoVa training substantially

reduces reconviction rates among adult offenders with established deficits on cognitive skills. Further research should focus on the circumstances and the conditions under which CoVa can be effective in various subgroups of offenders. In addition, we advise to examine how the measurement of the cognitive skills can be conducted in a more efficient way.