# Neuropsychological and psychophysiological factors in relation to the responsivity of the CoVa training in delinquents.

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This study focusses on the added value of neuropsychological and psychophysiological factors in predicting treatment response of delinquents in the CoVa training. The aim is to figure out in what way neuropsychological and psychophysiological...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Observational non invasive

# Summary

### ID

NL-OMON35835

**Source** ToetsingOnline

#### **Brief title**

Neuropsychology and psychophysiology as 'predictors' of the CoVa outcome.

### Condition

- Other condition
- Cognitive and attention disorders and disturbances

#### Synonym

antisocial behavior, cognitive deficits

#### **Health condition**

antisociaal gedrag, agressie, psychopathie

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#### **Research involving** Human

### **Sponsors and support**

Primary sponsor: NWO Source(s) of monetary or material Support: NWO

### Intervention

Keyword: Cognitive skills training, Neuropsychology, Pschophysiology, Treatment response

### **Outcome measures**

#### **Primary outcome**

The first main question in this study is:

What is the predicted value of neuropsychological and psychophysiological

factors in relation to treatment reponse?

To answer this question a correlation should be made between the independent (neuropsychological and physiological) variables and the dependent (outcome) variables:

The independent variables are:

-score on the Stroop-Color-Word task

-score on the Stop Signal Task

-score on the Tower of London

-score on the Emotionele stroop task

-score on the Facial mimicry task

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-score on the Reading the Mind in the Eyes task -score on the Social Moral Reflection Task -score op de Concept Shifting Task -score on the Wisconsin Cart Sorting Task -score on the Iowa Gamble Task -score on the D2 taak -score on the N-Back -score on the Startle Eye reflex taak -score on the 2D:4D finger index -cortisol level -testosterone level -aplha amylase level -oxytocin level -heart rate (variability) -skin conductance

The dependent variables are:

-Social Dysfunction and Aggression Scale (SDAS) score

-Behavioural Rating Scale (BRS)

-Treatment experience

-Absence and drop-out during the CoVa training

-Eysenck Impulsivity Scale (Eysenck, 1994)

-Gough Socialisation Scale (Cough, 1960)

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-Locus of Control (Craig e.a., 1984)

-TMS-F Sociale Wenselijkheid (Drieschner, 2005)

-Social Problem Solving inventory-Revised (D\*Zurilla, Nezu, & Maydeu-Olivares,

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-BIS-11 CAPL (subschaal van Baratt Impulsivity Scale; Baratt, 1994)

The second main question of this research is:

Do neuropsychological and psychophysiological factors change after the CoVa

training?

In order to find an answer on this question the change in the independent

variables is studied.

#### Secondary outcome

nvt

# **Study description**

#### **Background summary**

Currently neuropsychological and psychophysiological factors are not incorperated in the psychological 'What Works' - explanation model of criminal behavior. As a result these factors are not taken up in the treatment programs based upon this model which are implemented in the United Kingdom, Canada and the Netherlands. Although in general these interventions are effective, it does not seem to work for a fairly high percentage of delinquents. A hypothesis in this research is that neuropsychological and psychophysiological factors could have an added value in the 'What Work's - explanation model and the efficacy of the interventions and assessments based upon this model. In the current research this hypothesis is studied with regard to predicting treatment outcome of the Cognitive Skills (CoVa) training.

### **Study objective**

This study focusses on the added value of neuropsychological and psychophysiological factors in predicting treatment response of delinquents in the CoVa training. The aim is to figure out in what way neuropsychological and psychophysiological factors can be used as treatment indicators in the selection procedure for specific cognitive skills interventions and indirectly to reduce recidivism.

### Study design

An experimental group (with CoVa training) and a control group (without CoVa training) will make up the quasi experimental study design. However, it is not a randomized controlled trial since the Dutch Probation Service allocates delinquets to the CoVa training.

### Study burden and risks

The burden associated with participation in this study will contain: completing three questionnaires, a short mental state interview, neuropsychological tests, partially with a webcam, and physiological measurements; resting heart rate, skin conductance and six salivary samples to measure current cortisol, alpha amylase, oxytocin and testosterone levels. This procedure will take about four hours. There are no risks associated with participating in this study. There are no benefits.

# Contacts

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# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

### **Inclusion criteria**

- 1. Meets the criteria to participate the CoVa training
- 2. Legally capable
- 3. Normal intelligence level > 70
- 4. Age > 18
- 5. Signed informed consent

### **Exclusion criteria**

 A personal situation seriously impairing - according to the opinion of the attenting psychologist - the ability to give informed consent
Unsufficient Dutch language skills

# Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Diagnostic

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### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	20-12-2011
Enrollment:	300
Туре:	Actual

# **Ethics review**

Approved WMO	
Date:	11-10-2011
Application type:	First submission
Review commission:	METC Amsterdam UMC

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register CCMO ID NL36062.029.11