

# Physical activity and cognitive control in multiproblem young adults

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON20859

### Source

Nationaal Trial Register

### Health condition

multiproblem young adults, cognitive control (i.e., response inhibition, error processing, and cognitive interference).

## Sponsors and support

**Primary sponsor:** Department of Child and Adolescent Psychiatry VUmc Medical Center Amsterdam

**Source(s) of monetary or material Support:** Reclassering Nederland

## Intervention

## Outcome measures

### Primary outcome

Primary study parameters/outcome of the study: response inhibition, error processing, and interference (i.e., as measured with behavioral performance on the Go/no-go, Flanker, and Stroop), self-reported physical activity (i.e., as measured with the International Physical Activity Questionnaire), and self-reported delinquency (i.e., as measured with the WODC Self-Reported Delinquency Questionnaire).

## Secondary outcome

Secondary study parameters/outcome of the study: socio-demographics (e.g., age, weight, length and possible other confounding factors), intelligence as measured with a Screener for Intelligence and Learning Disabilities (SCIL 18+), impulsivity as measured with Dutch Barratt Impulsiveness Scale (BIS-11), sensation seeking as measured with the Brief Sensation-Seeking Scale (BSSS), and cognitive distortions as measured with How I Think Questionnaire (HIT).

## Study description

### Background summary

A randomized control trial design with repeated measures will be used to examine the association between physical activity and cognitive control in young adults facing a plethora of problems, including frequent substance use, a history of delinquency, no daytime activities (e.g., no work or education), and behavioral and psychological problems. They will participate in either a light-active or moderate-active physical activity program for three months. It is hypothesized that physical activity will have a positive (dose-response) effect on cognitive control, measured as error processing, response inhibition and interference effect.

### Study objective

It is hypothesized that physical activity will have a positive (dose-response) effect on cognitive control, measured as error processing, response inhibition and interference effect.

### Study design

T0 (i.e., baseline)

T1 (i.e., 6 weeks after T0)

T2 (i.e., 3 months after T0)

### Intervention

All participants at De Nieuwe Kans will participate in a mandatory sports program three times a week independent of participation in the study. Participation in the study (i.e., neuropsychological tests and questionnaires) is not mandatory. Cognitive control (response inhibition, error processing, and cognitive interference) will be assessed by behavioral performance on three neuropsychological tasks. In addition, multiple questionnaires will be used to assess other primary and secondary outcomes.

## Contacts

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## Eligibility criteria

### **Inclusion criteria**

Multiproblem young adults (18-27, all men) who participate in the day treatment at De Nieuwe Kans and are sufficient enough in the Dutch language to understand tests and instruction.

### **Exclusion criteria**

Indication of severe psychopathology (e.g., acute psychosis, severe mood disorder, as assessed by a physician) and color blindness.

## Study design

### **Design**

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial

Masking:	Open (masking not used)
Control:	Active

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-04-2018
Enrollment:	130
Type:	Actual

## IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Positive opinion	
Date:	27-08-2018
Application type:	First submission

## 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	ID
NTR-new	NL5050
NTR-old	NTR7448
Other	METc VUmc : 2018.409

## Study results