SCreen & INtervene Neurobiological assessments in screening and individual treatment decisions in the forensic youth setting.

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

Summary

ID

NL-OMON56535

Source
ToetsingOnline

Brief title
SCIN

Condition

- Other condition
- Psychiatric and behavioural symptoms NEC

Synonym
antisociality, delinquent behavior, risk behavior

Health condition

antisociaal gedrag en delinquentie

Research involving
Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: Nationale Wetenschapsagenda (NWA-ORC),Ministerie van Jusititie

Intervention

Keyword: antisocial behavior, biopsychosocial model, neurocognitive functioning, neurophysiology

Outcome measures

Primary outcome

The main study parameters are the mental health status, societal functioning

and reoffending rates of participants.

Secondary outcome

The secondary study parameters consist of the quality of life of the

participants and their subjective social status.

Study description

Background summary

Antisocial behavioral problems in youth, such as delinquency, have a major societal impact, as most criminal violent behavior is committed by juveniles and young adults. Forensic treatment institutions aim to diagnose, predict, treat and reduce the risk of reoffending of delinquent youth. However, not all youth in juvenile forensic psychiatry benefit sufficiently from current intervention programs. Criminal recidivism rates and long-term mental health problems remain substantial. Treatment and risk assessment are insufficiently tailored to the specific individual developmental problems and dysfunctions. The leading biopsychosocial model aims to explain the development and persistence of antisocial and delinquent behavior from an interaction between psychological, environmental, neurocognitive and neurobiological factors. Neurobiological and neurocognitive development, specifically during

adolescence, play a pivotal role in the development of severe and persistent delinquent behavior. Therefore, neurobiology and neurocognition could offer a promising novel approach to complement assessment and treatment in forensic clinical practice. However, fundamental knowledge on individual biopsychosocial developmental profiles, how forensic treatment affects neurobiological development, and how changes in neurobiology relate to treatment outcome, is currently lacking.

Study objective

Over the last decades, much fundamental knowledge has been obtained about the neurobiology of antisocial behavior on group level. The main aim of the current study is to translate this group-level knowledge to individualized, developmental profiles of suspected and convicted juveniles and adolescents. Using latent class regression techniques, we aim to identify subgroups in the population with distinct biopsychosocial profiles.

The data collected from repeated screenings will provide input for the development of biopsychosocially informed, statistical models to assess neurodevelopment, biopsychosocial changes in relation to treatment and treatment success as measured by societal functioning, quality of life and reoffending. During the development of these models, statistical analyses will be performed to explore the added predictive value of our target measures besides the psychosocial measurements already used in clinical practice.

Study design

This study has a longitudinal, observational design, with neurophysiological, neuroendocrinological, and neurocognitive assessments in combination with standard psychosocial measurements during screening and assessment in forensic clinical practice. To achieve this, a standardized neurobiological assessment battery will be administered at multiple points in time, with the last follow-up one year after release from prison.

Study burden and risks

Burden for participants consists of 2 to 4 3-monthly assessments with a duration of 1 to 2 hours. These assessments consist of questionnaires, neuropsychological tasks, as well as stress and emotion reactivity tasks with non-invasive neurophysiological and neuroendocrinological measurements. We expect a small burden from stress and emotion reactivity tasks (presentation task, aversive noise anticipation task and emotional film clip). Measures are taken to minimize this burden and successful use of the measurements has been reported in studies with children and adolescents from our target population. There are no risks regarding their criminal trial or treatment, since practice as usual will not be interfered with. Participation in any part of the study is

completely voluntary. Although the participants do not receive direct benefits from participation, there are greater benefits for society from knowledge that could be gained from the proposed study.
This study will provide fundamental knowledge on the added value of neurobiology in screenigs for treatment, on the changability of neurobiology in reaction to treatment and the relationship between neurodevelopment and antisociality during adolescence.This knowledge is needed to 1) improve the prediction of reoffending risk, to 2) improve treatment success by tailoring interventions to the specific needs and risks of individual youth and to 3) aid in decision making for the application of Adolescent Criminal Law. It is expected that these improvements will lead to an improvement in psychosocial functioning and ultimately to a decrease in recidivism in this group of young offenders, which not only benefit these youth, but also the society as a whole.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)

Adults (18-64 years)

Inclusion criteria

Dutch speaking; able to communicate in Dutch without mediation by an interpreter
12-27 years of age at start of first measurement
Involved in the Dutch Criminal Justice System at the moment of recruitment (that is, via State Juvenile Justice Institutions, Pro Justice, or the Netherlands Probation Service)

Exclusion criteria

Presence of acute florid psychosis
(Further) participation is discouraged by institution staff.
Pregnancy

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-09-2023
Enrollment:	800
Type:	Anticipated

Ethics review

Approved WMO

Date:	14-02-2024

Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	25-07-2024
Application type:	Amendment
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	ID
CCMO	NL84928.018.23