

Freeze! Nationaal Politie Onderzoek

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON24254

Source

Nationaal Trial Register

Brief title

PIA

Health condition

Posttraumatic stress disorder (PTSD), Trauma-related complaints (e.g. anxiety, depression, aggression).

Posttraumatische stress stoornis, Trauma-gerelateerde klachten (angst, depressie, agressie).

Sponsors and support

Primary sponsor: Donders Institute for Brain, Cognition and Behavior, Centre for Cognitive Neuroimaging, Radboud University Nijmegen, Nijmegen, the Netherlands

Source(s) of monetary or material Support: NWO: The Netherlands Organization for Scientific Research

Intervention

Outcome measures

Primary outcome

1. Associations between behavioral, psychophysiological, endocrine and neural automatic defensive responses at baseline (pre-exposure, wave 1) and development of trauma-related psychopathology after trauma exposure during emergency aid (difference wave 2 - wave 1)

in police recruits. Trauma-related symptoms are measured with the PTSD checklist for DSM-5 (PCL-5; PTSD symptoms), impulsive/premediated aggression scale (IPAS; aggression symptoms) and reactive proactive aggression questionnaire (RPQ; aggression symptoms).

2. Associations between changes in behavioral, psychophysiological, endocrine and neural automatic defensive responses after trauma exposure (difference wave 2 - wave 1) and development of trauma-related psychopathology after trauma exposure (difference wave 2 - wave 1) in police recruits.

Secondary outcome

1. Associations between (changes in) automatic defensive responses and secondary health outcome measures (e.g. anxiety, depressive symptoms) as a consequence of trauma exposure during the emergency aid.

2. Associations between (changes in) secondary biological outcome measures (e.g. epigenetics) and development of trauma-related psychopathology after trauma exposure during the emergency aid.

3. Potential moderating effects of individual differences, such as genetic variation (e.g. genetics, epigenetics, microRNA), endocrine markers in saliva and hair, physical fitness, and other individual characteristics (e.g. social support, attachment style, history of (childhood) traumatic events etc.) on (the association between (changes in)) automatic defensive responses and development of trauma-related psychopathology.

Study description

Background summary

Control over our automatic tendencies is often compromised in challenging situations when people fall back on automatic defensive responses, such as freeze-fight-flight reactions. Difficulties in controlling automatic defensive responses may not only impair split-second decisions under acute threat, but also increase the risk for and persistence of posttraumatic stress disorder (PTSD) symptoms. However, previous PTSD research has largely neglected the role of these automatic defensive responses in the development and maintenance of PTSD. Therefore, the 'Police-in-Action' study aims to investigate the role of automatic defensive responses in the development and maintenance of PTSD symptomatology after trauma exposure.

In this prospective study, 340 police recruits from the Dutch Police Academy will be tested

before (wave 1; pre-exposure) and after (wave 2; post-exposure) making the transition from the relatively safe environment of theoretical training to their first emergency aid experiences. Our main aim is to investigate whether automatic defensive responses, measured at the behavioral, psychophysiological, endocrine and neural level, may predict, or change in response to, the development of PTSD symptoms in police recruits after trauma exposure. Disentangling predisposing from acquired neurobiological abnormalities associated with the development PTSD symptoms may ultimately improve screening for individuals at risk for developing PTSD, and offer valuable targets for (early preventive) interventions for PTSD.

Study objective

In line with the Research Domain Criteria (RDoC), participants will be stratified based on their (trauma-related changes in) automatic defensive responses. We hypothesize that this stratification will be associated with the development of specific trauma-related symptoms.

Study design

Assessment of automatic defensive responses pre-trauma exposure (wave 1) and post-trauma exposure, after emergency aid experience at 15 months follow-up (wave 2).

Intervention

Not applicable. Observational study about the effects of trauma exposure during emergency aid in police recruits (N=340). A well-matched control group of civilians (N=85) is also included, which are not frequently exposed to potentially traumatic events.

Contacts

Public

P.O. Box 9010
Saskia B.J. Koch
Nijmegen 6500 GL
The Netherlands
+31243610979

Scientific

P.O. Box 9010
Saskia B.J. Koch
Nijmegen 6500 GL
The Netherlands
+31243610979

Eligibility criteria

Inclusion criteria

1. Between 18 and 45 years of age
2. Normal or corrected to normal vision
3. Normal uncorrected hearing
4. Body mass index between 18.5 and 30
5. Willingness and ability to give written informed consent

Exclusion criteria

1. Average use of > 3 alcoholic beverages daily
2. Average use of psychotropic medication or recreational drugs weekly or more
3. Use of psychotropic medication
4. Recreational drugs use within 72 hours prior to testing, or alcohol use within 24 hours prior to testing
5. Current psychiatric or neurological disorder, or within the last three months.
6. Regular use of systemic corticoids
7. Metal objects or fragments in or around the body
8. Medical plaster that cannot or may not be taken off
9. History of or current neurological treatment
10. History of or current endocrine treatment
11. History of head surgery
12. Current periodontitis
13. Claustrophobia

14. Epilepsy

15. Females participants: pregnancy

Control participants only:

16. Experience in law enforcement or military

17. Occupation involving potential trauma exposure, such as military or healthcare occupation

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	17-11-2014
Enrollment:	425
Type:	Actual

Ethics review

Positive opinion	
Date:	01-05-2017
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 44532

Bron: ToetsingOnline

Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL5989
NTR-old	NTR6355
CCMO	NL48861.072.14
OMON	NL-OMON44532

Study results

Summary results

Koch SBJ, Klumpers F, Zhang W, Hashemi MM, Kaldewaij R, van Ast VA, Smit A, Roelofs K: The role of automatic defensive responses in the development of posttraumatic stress symptoms in police recruits: protocol of a prospective study. European Journal of Psychotraumatology, 8:1, 1412226, DOI:10.1080/20008198.2017.1412226