# Stress sensitisation and psychosis risk.

No registrations found.

**Ethical review** Not applicable

**Status** Pending

Health condition type -

Study type Interventional

# **Summary**

#### ID

NL-OMON21501

Source

migratie

NTR

#### **Health condition**

psychosis stress experience sampling method migration psychose stress experience sampling methode

# **Sponsors and support**

**Primary sponsor:** Maastricht University

Source(s) of monetary or material Support: Maastricht University

#### Intervention

#### **Outcome measures**

### **Primary outcome**

1. Reactivity (changes in affect and psychotic symptoms) to self-reported stress in daily life, assessed using the Experience Sampling Method (ESM);

2. Changes in affect and psychotic symptoms in response to an experimental social stress situation involving negative feedback from peers.

### **Secondary outcome**

- 1. Group level differences in reactivity to other forms of (event related, activity) stress;
- 2. Differences in reactivity to an experimental social stress situation as dependent on the ethnicity of the peers causing the stress.

Controlling for: Family structure, SES, urbanicity, IQ (non-verbal), IQ (verbal), non-clinical psychotic symptoms, depression score, social defeat score, self-other schemas, childhood trauma, psychopathy, discrimination, perception of living environment, self-esteem, childhood care and abuse, drug use, life events, bullying, ethnic identity, perceived effects of stigma.

# **Study description**

### **Background summary**

Background of the study:

It has been suggested that the experience of social defeat / social exclusion is a major risk factor for psychosis. Such experience

may account for a large portion of the increased psychosis risk under Moroccan-Dutch, an immigrant group which is unsuccessful

in Dutch society and is frequently the subject of discrimination. Research with the Experience Sampling Method has shown that

psychosis patients and their siblings react more strongly to daily life stress. Increased stress reactivity meets the criteria for an

endophenotype for psychosis. We hypothesize that sensitisation of the stress system through chronic exposure to social stress is

an important mechanism leading to increased psychosis risk in migrants. If this is the case, healthy Moroccan-Dutch should show

increased stress reactivity and this result should not be explainable by non-social risk factors for psychosis. Understanding the

pathogenic mechanism would allow for the development of preventive interventions to improve migrant mental health.

Objective of the study:

To examine whether second-generation Moroccan-Dutch males are sensitised to social stress

and whether the sensitisation process might be moderated by genetic vulnerability.

### Study design:

2x2x2 full-factorial design with 2 observational factors (ethnicity; family history) and 1 intervention varying whether certain feedback might be discriminating.

## Study population:

160 healthy human male volunteers, 18-30 years old. Brothers of patients with psychotic disorder and non-sibling controls.

Second generation Moroccan-Dutch men and native-Dutch controls.

#### Intervention:

Exposure to a social stress situation, involving negative feedback from (fictional) peers. Peers are either members of the own or the other ethnic group.

Primary study parameters/outcome of the study:

- 1. Reactivity (changes in affect and psychotic symptoms) to self-reported stress in daily life, assessed using the Experience Sampling Method (ESM);
- 2. Changes in affect and psychotic symptoms in response to an experimental social stress situation involving negative feedback from peers.

Secundary study parameters/outcome of the study:

Group level differences in reactivity to other forms of (event related, activity) stress.

Differences in reactivity to an experimental social stress situation as dependent on the ethnicity of the peers causing the stress.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness:

Briefing, debriefing and all tests and questionnaires can be done at home in 4 hours. ESM is integrated in daily life and takes about 3 hours over a period of eight days. Time investment (7.5 hrs) will be compensated with a monetary reward. Participants

will not benefit directly, but will contribute to better prevention of psychotic disorder. Risks of participating are negligible. Second

generation Moroccan males are selected as proxy for social exclusion because of consistent reports of a strongly elevated

psychosis risk in that group as well as reports of high discrimination rates. Additionally Moroccans are the most numerous

minority group in the region. Siblings of patients are a practical proxy for genotypic vulnerability.

### Study objective

We hypothesize that Moroccan-Dutch differ from native-Dutch in stress reactivity. This difference is not explained by group differences in known non-social risk factors for psychosis. Affirmative findings in the current study would support to the idea that social factors, notably the experience of social exclusion, increase psychosis risk through the mechanism of sensitization. Additionally, we hypothesize that genetic factors can moderate the relationship between exposure to social exclusion and sensitisation to stress. Individuals with such genes might have increased stress reactivity in the first place, but they could also predispose individuals to become sensitised to stress.

### Study design

Briefing with questionnaires, 8 days of experience sampling, intervention and immediate debriefing.

#### Intervention

After completing the ESM data collection all participants are exposed to a social stress situation. This involves negative feedback on a personal digital profile given by (fictional) peers. It is varied if feedback is possible discriminatory. All participants get the same feedback, but half are shown same-ethnicity peers and half are shown other-ethnicity peers. In the latter case participants might interpret the information as discrimination. Immediately before and after the exposure participants are tested on the white noise task (measuring psychotic perceptions) and the PANAS (measuring mood). The total procedure takes about 30 minutes.

The current study uses the Social Defeat Stress Task developed by van Winkel and Wichers (unpublished). In this paradigm, participants are asked to present themselves in a profile of

the type used on social networks and dating sites. They are told their profile will be rated by

peers. They record a 1 minute clip, in which they talk about their interests and their life motto. They are then presented with 5 fake peer profiles, introduced as the profiles of other participants in the experiment. They watch the clips and rate each person on three dimensions (coolness, attractiveness and intelligence) with 1 - 10 marks. They also comment on each rating in a short sentence. The fake peers are matched in age to the participant (+/- 2 years) and are all male. As an addition to the original paradigm, we vary the

ethnicity of the peers. Half of the participants in each ethnic group are shown five Moroccan-Dutch profiles and the other half are shown five native-Dutch profiles.

In a follow up session the paradigm exposes participants to an experimental social stressor. Participants complete a Positive And Negative Affect Scale (PANAS; visual analogue format) and a white noise task. Participants view their own film clip again. They are then presented with the same type of feedback they generated in the initial session, 3 grades and 3 short comments, by each of the five fake peers. The feedback is moderately negative. By random assignment participants are in a condition with peers of their own ethnicity or not, hence a condition with or without possible ethnic discrimination. Such discrimination is always in the eye of the beholder, since the message content is exactly the same in both conditions, only the message source is varied. To further process the feedback, the participants have to rate to what extent they agree with each of the 15 comments. Finally they are made to believe that they compare unfavourably to the rest of the study population. They then complete the PANAS and the white noise task again. Directly after the end of data collection the participants are thoroughly debriefed about the deception. This involves showing that all participants received the same feedback, and will continue until it is clear to the researcher that the participant has fully understood.

# **Contacts**

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# **Eligibility criteria**

### Inclusion criteria

- 1. Male;
- 2. Age 18-30;
- 3. Second generation Moroccan or native-Dutch.

## **Exclusion criteria**

- 1. Mental retardation (IQ < 70) and/or illiteracy;
- 2. Diagnosis of psychotic disorder.

# Study design

## **Design**

Study type: Interventional

Intervention model: Factorial

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-10-2011

Enrollment: 160

Type: Anticipated

# **Ethics review**

Not applicable

Application type: Not applicable

# **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 NL2822 NTR-old NTR2963

CCMO NL37381.068.11

ISRCTN wordt niet meer aangevraagd.

# **Study results**

### **Summary results**

N/A