The natural context of mental health: An exploration of the health-promoting effects of nature and daylight employing ecological momentary assessment

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

Summary

ID

NL-OMON36947

Source
ToetsingOnline

Brief title
The natural context of mental health

Condition

- Other condition
- Psychiatric disorders NEC

Synonym
mental health, wellbeing

Health condition

mentaal welzijn (stress, zelf-regulatie, vitaliteit)

Research involving
Human

Sponsors and support

Primary sponsor: Technische Universiteit Eindhoven
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Daily life, Environment, Mental health, Restoration

Outcome measures

Primary outcome

The main research question is whether naturalness and amount of daylight in the environment can influence reported mood and whether naturalness and amount of daylight in the environment can influence number of self-control lapses.

Secondary outcome

not applicable

Study description

Background summary

Both natural environments and daylight have been found to exhibit beneficial effects on many facets of well-being. Both have been found to improve cognitive performance, mood, and mental and physical health. Furthermore, stress reduction and an increase in vitality have also been reported.

Such effects have been reported for the general population, but effects may be even more pronounced for those in poor mental health, in particular pertaining to depressive symptoms, burnout, and declined self-regulation capacity. The literature also indicates that most studies have been performed in laboratories with relatively low ecological validity and exposures limited in duration. In contrast, field studies with high ecological validity typically confounded nature and daylight exposure, often without acknowledging this. Lastly we should note that many of the field studies * particularly those centred on daylight * have been retrospective in nature or even based on archival data.

In the current study, we propose to employ the experience sampling methodology to explore the dynamics of mood, vitality and self-control in relation to the availability of natural elements and daylight exposure. ESM has been successfully employed in previous research to explore the phenomenology, symptom patterns, and environmental risks for various psychiatric disorders. An ambulatory assessment protocol will explore correlational patterns of mood and context, reported in the moment and in daily life. Moreover, the structured recording of daylight and natural elements in the direct environments may help untangle the separate effects of these stimuli. We expect to find a positive influence of daylight and nature on mood, self-control, stress reduction, and vitality. We will first of all investigate whether indeed natural elements and daylight can produce measurable beneficial effects on mental health. Secondly, we will investigate whether severity of mental complaints will affect the beneficial effects of nature and daylight.

Study objective

The main objective of the study is to investigate whether natural elements and/or daylight can produce measurable beneficial effects on mental health * in particular mood, vitality, stress relief and self control strength * during the course of the day, based on assessments in the moment (no recall bias) and in the real world (ecological validity). Secondly, we will investigate whether mental health status moderates the restorative effects of nature and daylight.

Study design

Observational and longitudinal: The Experience Sampling Method (ESM) is a structured diary method in which subjects are asked in daily life to report their thoughts and feelings, context (e.g. location, company, activity), and their appraisal of the context.

Study burden and risks

The study consists of an introduction session, an Experience Sampling Protocol, and the debriefing. Participants visit the GGzE or TU/e campus twice, once for the introduction session and once for the debriefing. During the experience sampling period, each participant receives a smart phone on which the experience sampling questionnaires run as an application. For 6 consecutive days, they will receive eight requests to fill out the questionnaire on (stratified) random moments between 8:00 a.m. and 10:00 p.m. Filling out the experience sampling questionnaire will take 4-5 minutes, but they can decide to stop halfway the questionnaire.

The main burden for participation in the study will be time consumption. No adverse or serious adverse events are expected beyond the time expenditure. Participants will receive a compensation for their effort (¤ 30,00) as well as

travel expenses. Furthermore, approximately a week after their participation they will receive an overview of their own experience sampling data and at the end of the study a newsletter will be sent to all participants explaining the results of the study.

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

Inclusion criteria for the healthy group are scoring a T-score (based on the non-patient norm) lower than 60 on the depression and anxiety subscales of the SCL-90-R, scoring lower than 14 on the BDI, and not having sought professional mental health support in the past three months.
For the clinical group the criteria are scoring a T-score (based on the non-patient norm) higher than 60 on the depression or anxiety subscale of the SCL-90-R, or scoring higher than

14 on the BDI. Comorbidity is no problem.

Exclusion criteria

Exclusion criteria are:
* Participation, or intended participation in the *emotionele veerkracht bij depressie* study, currently running at GGzE (also an experience sampling study).
* Having sought professional mental help while not scoring a T-score (based on the non-patient norm) higher than 60 on the depression or anxiety subscale of the SCL-90-R, or scoring higher than 14 on the BDI.
* Active psychoticism, indicated by T-score (based on the psychiatric patient norm) higher than 70 on the psychoticism scale of the SCL-90-R,
* Suicidal ideation, indicated by a BDI score of 41 or higher, a score of 2 or higher on item 9 of the BDI, or a SCL-90-R depression T-score (psychiatric patient norm) over 70.
* Scoring higher than 6 on the Drug Abuse Screening Test (DAST-10).

Study design

Design

Study type: Observational non invasive

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-08-2012
Enrollment:	60
Type:	Actual

Ethics review

Approved WMO

Date:	23-10-2012
Application type:	First submission

Review commission: METC Maxima Medisch Centrum (Veldhoven)

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	NL40667.015.12