# Examining the effects of outdoor recreational experiences on military veterans with PTSD

Recruitment status	<ul><li>Prospectively registered</li></ul>		
No longer recruiting	[X] Protocol		
Overall study status	Statistical analysis plan		
Completed	[X] Results		
Condition category  Mental and Behavioural Disorders	Individual participant data		
	No longer recruiting  Overall study status  Completed		

### Plain English summary of protocol

Background and study aims

Exposure to the natural environment is increasingly thought to benefit psychological health. Recent reports also suggest that outdoor activities that include recreational pursuits (such as surfing or fishing) coupled with the opportunity to socialize with others in similar circumstances may be helpful to military veterans experiencing Post-Traumatic Stress Disorder (PTSD). This study will evaluate this possibility.

# Who can participate?

Military veterans with a diagnosis of post-traumatic stress disorder

### What does the study involve?

Veterans with PTSD will be allocated to either an active outdoor recreational pursuit (angling) or a waitlist control group (this group will receive the intervention at a later date). We will measure changes to their symptoms (PTSD, depression, anxiety and other aspects of well-being) 2 weeks before the intervention, 2 weeks after the intervention for both groups; The waitlist participants will be also be reassessed two weeks after they subsequently completed the intervention and both groups will be followed up 4 months post-intervention.

What are the possible benefits and risks of participating?

The participants for this study are military veterans with PTSD and other anxiety-related issues. They, therefore, have mental health problems but this is a defining aspect of the study and cannot be undertaken with participants without these issues. It is not thought there are any risks in this study above and beyond those normally encountered in everyday life.

It is thought that exposure to an outdoor recreational experience will be beneficial in terms of decreased anxiety, depression and PTSD-symptoms and increased well-being.

Where is the study run from?

Department of Psychology, University of Essex (UK)

When is the study starting and how long is it expected to run for? May 2015 to December 2015

Who is funding the study?
This study did not receive any funding

Who is the main contact? Dr. Nicholas Cooper ncooper@essex.ac.uk

# **Contact information**

# Type(s)

Scientific

### Contact name

Dr Nicholas Cooper

#### **ORCID ID**

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### Contact details

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# Additional identifiers

# **EudraCT/CTIS** number

Nil known

**IRAS** number

# ClinicalTrials.gov number

Nil known

# Secondary identifying numbers

Essex\_NC1408\_2

# Study information

### Scientific Title

Examining the effects of outdoor recreational experiences on the mental health and well-being of military veterans with post-traumatic stress disorder (PTSD): a randomized controlled trial

# **Study objectives**

It is hypothesized that participants in the intervention group will experience a reduction in PTSD-related symptomology and an increase in subjective well-being relative to participants in a wait list control group, as a consequence of a short, outdoor, recreational activity.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Approved 28/08/2014, the University of Essex Ethics Committee (Science & Health Ethics Sub-Committee, University of Essex, Wivenhoe Park, CO4 3SQ; reo-governance@essex.ac.uk; +44 (0) 1206 87356), ref: NC1408

### Study design

Randomized waitlist-controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Community

### Study type(s)

Treatment

# Participant information sheet

Not available in web format, please use contact details to request a participant information sheet.

# Health condition(s) or problem(s) studied

Post-traumatic stress disorder (PTSD)

#### **Interventions**

The intervention is designed to deliver an outdoor recreational activity (fishing) in a peer group context and to facilitate opportunities to socialize and to discuss military experience or PTSD experience if the participant so wishes. The intervention lasts 2 days (1 night) and will take place at a rural, lakeside location.

Participants will be randomly allocated to one of the two levels of the between-groups factor (to either active intervention or waitlist control). They will be sequentially numbered and allocated to condition by means of an online blocked randomization tool.

Each participant will complete questionnaires to assess their PTSD, depression, anxiety, and stress. The intervention group participants will be given these at 2 weeks before they receive the intervention, at 2 weeks following the intervention. The waitlist participants will be also be assessed at baseline and four weeks later. The waitlist group will also be reassessed two weeks after they subsequently completed the intervention. Both groups will be followed up 4 months post-intervention.

### Intervention Type

Behavioural

### Primary outcome measure

- 1. PTSD symptoms assessed by the PCL-5 at baseline, 2 weeks and 4 months
- 2. Depression assessed by the Patient Health Questionnaire (PHQ-9) at baseline, 2 weeks and 4 months
- 3. Anxiety assessed by the General Anxiety Disorder (GAD-7) at baseline, 2 weeks and 4 months

### Secondary outcome measures

- 1. Perceived stress assessed by the 10-item Perceived Stress Scale (PSS) at baseline, 2 weeks and 4 months
- 2. General social functioning assessed by the Work and Social Adjustment scale (WSAS) at baseline, 2 weeks and 4 months
- 3. Positive change in psychological growth assessed by the Psychological Wellbeing Post-Traumatic Changes Questionnaire (PWB-PTCQ) at baseline, 2 weeks and 4 months

### Overall study start date

14/05/2015

### Completion date

18/12/2015

# **Eligibility**

# Key inclusion criteria

- 1. Military veteran
- 2. Diagnosis of post-traumatic stress disorder (PTSD)

### Participant type(s)

Other

### Age group

Αll

#### Sex

Both

### Target number of participants

25

### Total final enrolment

18

### Key exclusion criteria

Currently receiving psychological therapy for PTSD

### Date of first enrolment

13/07/2015

### Date of final enrolment

27/07/2015

# Locations

# Countries of recruitment

England

**United Kingdom** 

Study participating centre Department of Psychology, University of Essex Wivenhoe Park

Colchester United Kingdom CO4 3SQ

# Sponsor information

### Organisation

University of Essex

# Sponsor details

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# Sponsor type

University/education

### Website

http://www.essex.ac.uk/

### **ROR**

https://ror.org/02nkf1q06

# Funder(s)

# Funder type

#### Funder Name

investigator initiated and funded

# **Results and Publications**

### Publication and dissemination plan

The results of the intervention will be published in a peer-reviewed international journal. They will also be presented at relevant national and international conferences and will be disseminated widely through social and conventional media platforms.

### Intention to publish date

01/03/2020

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study will be stored in a publically available repository. Our data are stored in an online repository OSF Home. https://osf.io/63hrb/?view\_only=2c8ffabdc8a64e77ba649c47f6df6c75.

Data are de-identified participant data (IPD) and age and gender removed from the data sets because the small sample size risks identification. The data can be downloaded by anyone with the link. The link will also be provided in the published paper.

# IPD sharing plan summary

Stored in repository

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	25/11/2020	26/01/2021	Yes	No
Protocol (other)			28/03/2023	No	No