

# Examining the effects of outdoor recreational experiences on military veterans with PTSD: a pilot study

<b>Submission date</b> 31/01/2020	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 06/02/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 28/03/2023	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## 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?

Three groups of veterans with PTSD will each undertake a group outdoor activity (angling, equine care or archery and falconry). We will measure changes to their symptoms (PTSD, depression, anxiety) 2 weeks before the activity, 2 weeks after the activity, and at 4 month follow up.

### What are the possible benefits and risks of participating?

Equine husbandry: There is some risk around horses. We will be working to the garrison stables health and safety guidelines and all participants are covered by the stables' indemnity insurance, in case of an injury occurring. There will be a first aid trained member of staff in attendance at all times.

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?  
June 2014 to June 2015

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

Who is the main contact?  
Dr. Nicholas Cooper  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
Nil known

**Protocol serial number**  
Essex\_NC1408\_1

## 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 pilot study

**Study objectives**

It is hypothesized that participants will experience a reduction in PTSD-related symptomology and an increase in subjective well-being as a consequence of a short, outdoor, recreational activity.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Approved 01/03/2015, 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: MW1502, MW1503

### **Study design**

Single-centre interventional design study

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

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

Post-traumatic stress disorder (PTSD)

### **Interventions**

Participants will be recruited and randomly allocated to one of the three levels of the between-groups factor. They will be sequentially numbered and allocated to condition by means of an online blocked randomization tool.

The three intervention groups are angling, equine husbandry, and falconry and archery. The three different activity interventions will run sequentially and employ the same eligibility criteria, recruitment process, and evaluation. Each activity intervention lasts 1 to 2 days and are designed to deliver professional coaching in an outdoor recreational activity in a peer group context and to facilitate opportunities to socialize and to discuss military experience or PTSD experience if the participant so wishes.

Each participant will complete questionnaires to assess their PTSD, depression, anxiety, and stress. These will be given at 2 weeks before they receive the intervention, at 2 weeks following the intervention and at 4 months follow up.

### **Intervention Type**

Behavioural

### **Primary outcome(s)**

1. PTSD symptoms assessed by the PTSD Checklist Military (PCL-M) 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

**Key secondary outcome(s)**

Perceived stress assessed by the 10-item Perceived Stress Scale (PSS) at baseline, 2 weeks and 4 months

**Completion date**

08/06/2015

**Eligibility****Key inclusion criteria**

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

**Participant type(s)**

Other

**Healthy volunteers allowed**

No

**Age group**

All

**Sex**

All

**Total final enrolment**

30

**Key exclusion criteria**

Currently receiving psychological therapy for PTSD

**Date of first enrolment**

28/08/2014

**Date of final enrolment**

08/03/2015

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**

Department of Psychology, University of Essex  
Wivenhoe Park  
Colchester

United Kingdom  
CO4 3SQ

## Sponsor information

### Organisation

University of Essex

### ROR

<https://ror.org/02nkf1q06>

## Funder(s)

### Funder type

Not defined

### Funder Name

investigator initiated and funded

## Results and Publications

### 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](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?
<a href="#">Results article</a>	results	25/11/2020	26/01/2021	Yes	No
<a href="#">Protocol (other)</a>			28/03/2023	No	No