

Meditation to reduce distress and absenteeism in ambulance workers

Submission date 26/08/2026	Recruitment status Not yet recruiting	☒ Prospectively registered ☒ Protocol
Registration date 28/08/2026	Overall study status Ongoing	☐ Statistical analysis plan ☐ Results
Last Edited 28/08/2026	Condition category Mental and Behavioural Disorders	☐ Individual participant data ☒ Record updated in last year

Plain English summary of protocol

Background and study aims

Ambulance staff in the UK have some of the highest sickness absence rates of any NHS staff group, driven largely by stress, anxiety and depression. This study tests whether learning Transcendental Meditation (TM), a simple meditation technique practised for 20 minutes twice a day, can reduce stress-related sickness absence and psychological distress among ambulance workers, compared with those who continue their usual routine.

Who can participate?

Ambulance staff and call handlers aged 18 or over, currently employed by one of the four participating NHS Ambulance Trusts, who are fluent in English, have not previously learned TM, and can commit to a four-day TM instruction course and the study's follow-up surveys.

What does the study involve?

Participants are randomly allocated (like a coin toss) to either learn TM straight away or to continue as normal for 9 months before being offered the same TM course. All participants complete online surveys about their wellbeing at the start of the study and at 3, 6 and 9 months, plus a brief twice-monthly report on any work absences.

What are the possible benefits and risks of participating?

TM is a non-invasive, non-pharmacological technique. There's no guarantee of personal benefit, but participants may find TM helps them manage stress, and their involvement will contribute evidence that could support ambulance staff wellbeing more broadly.

Some people may experience brief, minor effects; very rarely, meditation can bring up psychological difficulties in vulnerable individuals, which is why anyone currently experiencing significant psychiatric instability is not eligible.

Where is the study run from?

University of Westminster (UK), in partnership with London Ambulance Service, Yorkshire Ambulance Service, South East Coast Ambulance Service, Welsh Ambulance Service, and West Midlands Ambulance Service NHS Trusts.

When is the study starting and how long is it expected to run for?
October 2026 to December 2027.

Who is funding the study?
The David Lynch Foundation UK (delivery of the TM intervention and instructor costs)

Who is the main contact?
Dr Veruska Oppedisano, University of Westminster, v.oppedisano@westminster.ac.uk.

Contact information

Type(s)

Principal investigator, Scientific, Public

Contact name

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Additional identifiers

Integrated Research Application System (IRAS)
357646

Central Portfolio Management System (CPMS)
75135

Study information

Scientific Title

Restoring resilience: a trial of meditation to reduce distress and absenteeism in ambulance workers

Acronym

AMBTM

Study objectives

Primary objective: To compare the effect of Transcendental Meditation (TM) versus business-as-usual on (a) stress-related sickness absence and (b) psychological distress among ambulance workers.

Secondary objectives: To compare the effect of TM versus business-as-usual on PTSD symptoms, insomnia, professional fulfilment (including burnout), turnover intention, and health-related quality of life.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 25/08/2026, HRA and Health and Care Research Wales (HCRW) (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; -; approvals@hra.nhs.uk), ref: 26/HRA/1620

Primary study design

Interventional

Allocation

Randomized controlled trial

Masking

Blinded (masking used)

Control

Active

Assignment

Parallel

Purpose

Supportive care

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Neurotic, stress-related and somatoform disorders

Interventions

This study is a randomised controlled trial (RCT) evaluating the effects of Transcendental Meditation (TM) on mental health and workplace absenteeism among ambulance service personnel. The RCT will target 350 ambulance workers from the London Ambulance Service (LAS), the Yorkshire Ambulance Service (YAS), the South East Coast Ambulance Service (SECamb) and the West Midlands Ambulance Service (WMAS). Participants will be invited via email in 2026, drawn from a combined population of approximately 9000 frontline staff and call handlers in London, 7000 in Yorkshire, 3600 in the South East Coast and 4500 in the West Midlands. The selection of these four ambulance services ensures greater representativeness of the wider ambulance workforce across diverse settings. Participants will be clearly and comprehensively informed of the intervention, and only those providing informed consent will take part.

The computer-based randomisation will be stratified by Ambulance Service. Each trust will be randomly divided into two groups: one receiving the meditation intervention, and a comparison group receiving the intervention after the study concludes. A baseline survey will be conducted before the intervention to assess initial characteristics and evaluate balance across groups.

The RCT design is selected because it is the gold standard for evaluating causal effects of interventions, allowing for unbiased estimation of the impact of Transcendental Meditation by controlling for confounding factors through random allocation. This ensures that observed differences in outcomes between groups can be confidently attributed to the intervention itself rather than other external factors.

Recruitment

Invitation to participate in the study and registration links will be shared via staff newsletters, wellbeing bulletins, intranet posts, and communications from staff wellbeing leads. Ambulance staff are invited to register their interest and select from a list of convenient dates to attend an online group TM introductory presentation led by certified TM instructors and a member of the research team. Following the presentation, each participant attends an individual online meeting with a TM instructor to assess their eligibility. Those eligible and assigned to the treatment group are invited to choose from multiple start dates and locations over a 1-2-month period.

Before beginning instruction, participants are emailed a weblink to:

Complete a consent form

Complete the baseline online survey (approx. 15 minutes, using seven validated instruments).

Subsequent follow-up surveys are sent at 3, 6, and 9-months post-instruction. Bi-weekly online self-reports of sickness absence are collected for up to 9 months. Data is encrypted and managed via Jotform. Participants use coded IDs to ensure anonymity. Personal data is accessible only to the researchers and will be destroyed upon study completion.

TM Intervention Group

Participants allocated to the intervention group receive the standardised TM course delivered over four consecutive days, followed by six months of twice-daily self-practice (20 minutes per session). Instruction is offered either in person or in a blended remote format:

In-Person Course

Day 1: One-to-one instruction (75-90 min) with a TM instructor, including first meditation experience and guidance on daily practice.

In person or online:

Day 2: Group session (60-90 min) with individual check-in, Q&A, and group meditation.

Day 3: Group session (60-90 min) focusing on TM's physiological and psychological benefits.

Day 4: Group session (60-90 min), meditation, final Q&A, and personalised feedback.

Remote/Blended Course

After the in-person Day 1 instruction, Days 2-4 are completed using the TM app, which includes pre-recorded instructional videos and interactive Q&A segments.

Daily 30-minute online check-ins are held with TM instructors to support progress and ensure correct practice.

Post-Instruction Support

Participants are offered optional individual and group follow-up sessions via video conference and in person. These occur 7-10 days post-instruction and monthly for up to 6 months. Ongoing engagement is supported through:

Access to daily online group meditations

Local TM centre sessions

A closed Facebook group offering further resources and Q&A with experienced teachers

TM instructors track practice frequency via the TM application and participant reflections via evaluation forms. Participants are encouraged to maintain regular practice throughout the follow-up period.

Waitlist Control Group

Participants assigned to the waitlist control group continue with usual care for the duration of the study, which consists of carrying out their regular duties as NHS ambulance staff and accessing any standard occupational health or wellbeing services made available through their Trust, and complete the same assessment schedule. They are offered the full TM course after the 9-month follow-up.

Outcomes

- Primary outcome: psychological distress and self-reported stress-related absence over 9 months.
- Secondary outcomes: Validated measures of PTSD symptoms, health-related quality of life, professional fulfilment, and turnover intention measured at baseline, 3, 6 and 9 months. The study design incorporates flexibility in delivery to accommodate shift work and ensure retention. Ongoing support from TM instructors and the research team is designed to maximise adherence and data completeness.

Intervention Type

Behavioural

Primary outcome(s)

1. Stress-related sickness absence, measured using twice-monthly participant self-reporting at baseline and at 3, 6 and 9 months
2. Psychological distress measured using the General Health Questionnaire (GHQ-12) at baseline and at 3, 6 and 9 months

Key secondary outcome(s)

1. PTSD symptoms, measured using the Post-traumatic Checklist for DSM-5 (PCL-5), at baseline and at 3, 6 and 9 months
2. Professional fulfilment (including burnout), measured using the Professional Fulfilment Index (PFI), at baseline and at 3, 6 and 9 months
3. Insomnia, measured using the Insomnia Severity Index (ISI), at baseline and at 3, 6 and 9 months
4. Turnover intention, measured using the Turnover Intention Scale, at baseline and at 3, 6 and 9 months

5. Health-related quality of life, measured using the EuroQol-5 Dimensions-5 Levels scale (EQ-5D-5L), at baseline and at 3, 6 and 9 months

Completion date

31/12/2027

Eligibility

Key inclusion criteria

Participants will be selected on a first-come, first-served basis, with the first 350 individuals who satisfy all inclusion criteria (listed below), meet none of the exclusion criteria, and provide consent for study participation being enrolled.

Participants (in both the treatment and control group) must meet all of the following inclusion criteria to be eligible for the study.

1. Age 18 years and younger than 65: Participants must be adults legally able to provide informed consent.
2. Currently employed by any of the participating Ambulance Services. This includes all frontline ambulance staff and call handlers working in operational roles.
3. Willing and able to attend TM instruction sessions. Participants must be able to commit to the four consecutive initial instruction sessions (in-person or blended format), as well as regular TM practice.
4. Willing to complete all required assessments and track their TM practice, as described below:
 - 4.1. Post-Intervention Data Collection (both treated and control groups):
 - 4.1.1. Surveys: Psychological and wellbeing outcomes will be measured via three post-intervention online surveys at 3, 6 and 9 months, each taking approximately 15 minutes via Jotform.
 - 4.1.2. Bi-weekly Absence Self-Reports: participants will submit bi-weekly absence reports including reasons, using a secure online form via Jotform. Bi-weekly reminders will be sent by email.

A small subset of 20-25 participants in the treated group will be invited to a 30–45-minute semi-structured interview to explore their experiences of learning and practising TM. Interviews are held online via video conference. This qualitative component will be undertaken as part of a service delivery evaluation, rather than as a formal component of the clinical trial.

Participants in the treated group will be asked to use the TM app to track their meditation practice. To help monitor adherence to the intervention, they will be requested to share monthly screenshots of their app usage at the 3-, 6-, and 9-month follow-up.

5. Access to a device with internet connection: Required to complete online surveys, attend virtual sessions, participate in app-based or video-based TM instruction (for those choosing the blended option) and record TM practice.

6. Fluent in English: Sufficient proficiency in English is needed to understand study materials, instructions, and to complete assessments and participate in interviews.

7. Provides informed consent: Participants must review the Participant Information Sheet and give written informed consent prior to enrolling in the study, on the following aspects of the project:

- 7.1. Confirm that they have read the information sheet for the study, had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- 7.2. Understand that the participation is voluntary and that he is free to withdraw at any time without giving any reason, without his employment being affected.
- 7.3. Commit to completing the TM course and the home practice of two 20-minute TM sessions daily - morning and evening throughout the evaluation period (9 months), tracking your practice on the TM app.

- 7.4. Participate in this evaluation and complete the required surveys and the bi-weekly absence self-report as outlined in the consent form
- 7.5. Understand that the information collected about the participant may be used to support other research in the future and may be shared de-identified with other researchers.
- 7.6. Take part in the study.

Healthy volunteers allowed

Yes

Age group

Mixed

Lower age limit

18 Years

Upper age limit

65 Years

Sex

All

Total final enrolment

0

Key exclusion criteria

1. Not currently employed by participating Ambulance Services. Only staff employed by these NHS Trusts are eligible to take part.
2. Unable to commit to the TM instruction schedule. Individuals who cannot attend the four consecutive days of initial TM instruction (whether in-person or blended format) will be excluded, as consistent attendance is essential for correct instruction and adherence.
3. Previously trained in Transcendental Meditation (TM). This study is intended for individuals new to TM. Those who have already learned TM will be excluded.
4. Individuals who are within nine months of retirement or are planning to leave employment with the ambulance service within nine months.
5. Individuals on sick leave lasting more than 30 consecutive days at the beginning of the study.
6. Individuals who were currently psychiatrically unstable per self-report, or reported a psychiatric hospitalization in the past 6 months. Participants will be excluded if, on self-report screening carried out by TM instructors, they indicate that they are currently experiencing unstable or severe mental health difficulties that require active clinical management. For the purposes of this study, "psychiatrically unstable" includes any of the following:
 - 6.1. Current suicidal thoughts with plan or intent, or a suicide attempt/self-harm episode requiring medical attention in the past 3 months.
 - 6.2. Current or recent (past 3 months) psychotic symptoms (e.g. hallucinations, delusional beliefs) or a manic/hypomanic episode.
 - 6.3. Severe depression, anxiety, or post-traumatic stress symptoms that the participant reports as markedly interfering with day-to-day functioning (e.g. unable to work, care for self, or maintain basic routines).
 - 6.4. Current care under an NHS crisis team, Home Treatment Team, or recent psychiatric in-patient admission in the past 6 months.
 - 6.5. A major change in psychiatric medication in the past 4 weeks initiated in response to symptom deterioration.

Screening will be carried out via brief self-report questions. The TM instructors will not undertake diagnosis or treatment, but where screening indicates possible psychiatric instability, the individual will not be enrolled and will be encouraged to seek, or continue with, appropriate NHS mental health care.

Date of first enrolment

01/10/2026

Date of final enrolment

02/12/2026

Locations

Countries of recruitment

United Kingdom

England

Wales

Study participating centre

London Ambulance Service NHS Trust

220 Waterloo Road

London

England

SE1 8SD

Study participating centre

Yorkshire Ambulance Service NHS Trust

Springhill

2 Brindley Way

Wakefield 41 Industrial Estate

Wakefield

England

WF2 0XQ

Study participating centre

South East Coast Ambulance Service NHS Foundation Trust

Trust Headquarters

Nexus House

4 Gatwick Road

Crawley

England

RH10 9BG

Study participating centre

West Midlands Ambulance Service University NHS Foundation Trust

Millennium Point
Waterfront Business Park
Dudley Road
Brierley Hill
England
DY5 1LX

Study participating centre

Welsh Ambulance Services NHS Trust

Unit 7
Ffordd Richard Davies
St Asaph Business Park
St. Asaph
Wales
LL17 0LJ

Sponsor information

Organisation

University of Westminster Research and Knowledge Exchange Office (RKEO)

ROR

<https://ror.org/04ycpbx82>

Funder(s)

Funder type

Government

Funder Name

David Lynch Foundation

Alternative Name(s)

David Lynch Foundation for Consciousness-Based Education and World Peace, The David Lynch Foundation, DLF

Funding Body Type

Government organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository

- Repository: UK Data Archive (UKDA) — weblink to be confirmed once the collection is deposited
- Type of data: Anonymised version of the full study dataset, including responses on primary and secondary outcome measures and twice-monthly absence self-reports; no personally identifiable information included
- When available: Three years after study completion; duration of availability not time-limited beyond this
- Access criteria/mechanism: Safeguarded access — restricted to bona fide researchers, who must register with UKDA and agree to the relevant End User Licence before analysis is permitted
- Consent: Yes — participants are informed during consent that their de-identified data may be used to support other research and shared with other researchers
- Anonymisation: Full — participants are identified only by unique study ID; no names or identifying information appear in analytical datasets
- Ethical/legal restrictions: None beyond the safeguarded access and anonymisation controls described above

IPD sharing plan summary

Stored in non-publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version 5	01/07/2026	26/08/2026	No	Yes
Protocol file	version 5	16/12/2025	26/08/2026	No	No