# How writing impacts our emotions and thoughts

Submission date	Recruitment status  No longer recruiting	[X] Prospectively registered		
18/04/2022		☐ Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
19/04/2022		Results		
<b>Last Edited</b> 12/09/2024	<b>Condition category</b> Mental and Behavioural Disorders	Individual participant data		
		[X] Record updated in last year		

#### Plain English summary of protocol

Background and study aims

Poor mental health is a global problem, especially during the pandemic, and thousands of people suffer from low mood, loneliness, panic, and stress. However, access to psychological therapy is limited, and many people have to wait for a long time to get professional support. It is important to investigate the efficacy of self-help intervention, and the simple but efficient self-help intervention can help people improve mental health in daily life or even in a future pandemic. With this goal, the aim of this study is to examine the effectiveness of a writing intervention and how a writing intervention impacts people's emotion and thoughts. Evidence suggests that writing could help people feel less distressed, depressed, anxious, and happier. However, the potential mechanisms are still unclear. Therefore, the researchers would like to provide a 3-day online writing intervention and examine:

- 1. Whether it can reduce negative emotions and improve mental wellbeing
- 2. Why people can benefit from the writing intervention
- 3. How long the benefits of writing intervention can last

#### Who can participate?

Native English speakers currently living in the UK, aged 18 years and above, who are currently experiencing mild/moderate levels of distress

#### What does the study involve?

Participants complete an online screening questionnaire which only has 25 simple questions (screening questions and demographic information). If the participants are eligible, they will continue to answer an online survey for gathering some general information (e.g., mental health, wellbeing, emotion and thoughts), which will take around 25 minutes.

After the participants finish the online survey, they will receive an email/message to invite them to join the writing intervention. The writing intervention includes three writing sessions over 3 consecutive days for 20 minutes per session. During each writing intervention session, they will be requested to respond to several questions related to their current mood, and then they will be asked to write following an instruction. After the writing, the researchers will repeat the questions. Ideally, it is hoped that participants can finish this intervention over 3 consecutive days. However, it may be hard to commit to writing every single day. It is fine if the participants forget 1 day of writing, and they can pick up their writing anytime within 2 weeks from the day they start. However, no matter if the participants finish this 3-day writing intervention completely, after 2 weeks from their first writing day, the researchers will email/message them

to answer the online survey again, which they would respond to at the beginning of our study. Besides, they will follow up the participants for 3 months to assess the effect of the writing, and the online survey will be sent 1 month and 3 months after the first writing day. Thus, for the entire study, the participants will be requested to answer four online surveys (i.e., pre-writing session, post-writing session, 1-month follow-up, 3-month follow-up) and three writing sessions.

What are the possible benefits and risks of participating?

This study may or may not benefit the participants directly. According to the studies on writing intervention, some participants found writing helpful and useful, but some did not. However, this study will help researchers understand the writing intervention and further develop the writing intervention.

Taking part in this study presents no foreseeable risks to participants. However, the participants will be asked to answer questions and write something about personal experiences. They may revisit stressful memories or experience unpleasant thoughts, so this may be challenging and can temporarily lead to mild to moderate distress, usually lasting no longer than a few minutes. In the unlikely event that the participants experience the writing as extremely unpleasant, they can quit the writing at any time. All questionnaires and writing instructions have been safely and widely used in research.

Where is the study run from? University of Exeter (UK)

When is the study starting, and how long it is expected to run for? December 2021 to September 2024

Who is funding the study? University of Exeter (UK)

Who is the main contact? Dr Mengya Zhao Mengya.Zhao@liverpool.ac.uk

## Contact information

## Type(s)

Principal Investigator

#### Contact name

Dr Mengya Zhao

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## Additional identifiers

## **EudraCT/CTIS** number

Nil known

#### **IRAS** number

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

Nil known

## Study information

#### Scientific Title

How writing impacts our emotion and thoughts: a randomized controlled trial

#### Study objectives

The researchers would like to explore the effect of a 3-day online writing intervention and also compare the differences between expressive writing, guided narrative writing and self-compassionate writing. Specifically:

- 1. If participants can benefit from the 3-day online writing?
- 2. What's the differences between three writing techniques?
- 3. What are the mechanisms that writing intervention can reduce anxiety, depression, stress and PTSD symptoms?
- 4. How long will the benefits last?

Theoretically, this study can provide empirical evidence for different types of writing intervention and understand the mechanisms of the effect of writing intervention on people's mental health. Practically, this could be used for an online intervention, and it can support individuals in daily life or public health crisis (e.g., pandemic). This also could be used to support people on the waiting list receiving psychological therapy.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 08/04/2023, the School of Psychology Ethics Committee, University of Exeter (Washington Singer, Perry Road, Exeter, EX4 4QG, UK; +44 (0)1392 724656; n.j.moberly@exeter. ac.uk), ref: 12055

## Study design

Interventional randomized controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

#### Study setting(s)

Internet/virtual

## Study type(s)

Treatment

## Participant information sheet

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

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

Daily stress in adults with mild/moderate depressive symptoms and/or anxiety symptoms

#### **Interventions**

There are four writing interventions: expressive writing, guided narrative writing, self-compassionate writing and lifestyle writing (active control group). The writing intervention includes three writing sessions over 3 consecutive days for 20 minutes per session.

First the researchers will assess the eligibility of participants. Then they will randomly assign them into four intervention groups using random numbers and they will receive the preintervention assessment. After participants finish the online survey, participants will receive an email to invite them to join the writing intervention. During each writing intervention session. participants will be requested to respond to several questions related to the current mood and then they will be asked to follow an instruction to finish the writing session. After the writing, the researchers will repeat the mood questions again. Ideally, it is hoped that participants can finish this intervention over 3 consecutive days. However, the researchers understand that it may be hard to commit to writing every single day. It is fine if participants forget 1 day of writing, they can pick up writing anytime within 2 weeks from the day they finish the preassessment survey. However, no matter if they finish this 3-day writing intervention completely, after 2 weeks from their pre-assessment survey day, the researchers will email them to invite them to answer the online survey again (similar to the online pre-assessment survey). Besides, the researchers will follow up them for 3 months and specifically the online survey will be sent 1 and 3 months after the first writing day. Thus, for the entire study, they will be requested to answer four online surveys (i.e., pre-writing session, post writing session, 1-month follow-up, 3month follow-up) and three writing sessions. The survey should be around 25-35 min. All surveys and intervention sessions are online.

## Intervention Type

Behavioural

#### Primary outcome measure

- 1. Depressive symptoms and anxiety symptoms measured using the hospital anxiety and depression scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 2. Stress measured using the perceived stress scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 3. PTSD symptoms measured using the PDS-5 trauma test, peri-traumatic emotions questionnaire, and post-trauma growth at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 4. Self-compassion measured using the self-compassion scale (short form) at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 5. Mood measured using three basic dimensions of mood at each pre-/post- writing session

- 6. Self-compassion and state of connectedness with others measured using the visual analogue scale (VAS) at each pre-/post- writing session
- 7. Distress measured using subject units of distress scale at each pre-/post- writing session
- 8. Psychological processes in the writing (cognitive processes, positive emotion, negative emotion, and social processes) measured using Linguistic Inquiry and Word Count (LIWC) during writing sessions
- 9. Emotion regulation measured using the rumination reflection scale, short-form cognitive emotion regulation scale and difficulties in emotion regulation scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up

## Secondary outcome measures

- 1. Adverse childhood experiences measured using adverse childhood experience questionnaires at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 2. Sleeping problems measured using the insomnia severity index at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 3. Psychological wellbeing measured using the satisfaction with life scale and subjective happiness scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 4. Loneliness is measured using the UCLA loneliness scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 5. The impact of mental health problems measured using the work and social adjustment scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 6. Social support measured using the multidimensional scale of perceived social support scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 7. Gratitude measured using the gratitude questionnaire at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 8. Self-efficacy is measured using the general self-efficacy scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 9. Meaning of life is measured using the meaning in life questionnaire at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up
- 10. Resilience is measured using the brief resilience scale at pre-assessment, post-assessment, 1-month follow-up and 3-month follow-up

## Overall study start date

01/12/2021

## Completion date

09/09/2024

# **Eligibility**

## Key inclusion criteria

- 1. Native English speakers
- 2. Aged 18 years and above
- 3. Currently living in the UK
- 4. They are currently experiencing mild/moderate levels of distress (HADS score between 8-14)
- 5. Can read and write using a computer or laptop

## Participant type(s)

Healthy volunteer

## Age group

#### Adult

#### Lower age limit

18 Years

#### Sex

Both

## Target number of participants

200

#### Key exclusion criteria

- 1. Currently experience high levels of distress or low mood (HADS score above 14) or no symptoms (HADS score below 8)
- 2. Not be involved in any forms of psychological therapies (e.g., talking therapy, group intervention, support group, meditation exercises) during the study (i.e., 3 months)
- 3. On any form of anti-psychotic

#### Date of first enrolment

20/04/2022

#### Date of final enrolment

24/08/2022

## Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre University of Exeter

Psychology Department Washington Singer Perry Road Exeter United Kingdom EX4 4QJ

# Sponsor information

#### Organisation

University of Exeter

#### Sponsor details

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#### Sponsor type

University/education

#### Website

http://www.exeter.ac.uk/

#### **ROR**

https://ror.org/03yghzc09

# Funder(s)

## Funder type

University/education

#### **Funder Name**

University of Exeter

Alternative Name(s)

## **Funding Body Type**

Private sector organisation

#### Funding Body Subtype

Universities (academic only)

#### Location

United Kingdom

## **Results and Publications**

#### Publication and dissemination plan

- 1. Planned publication in a high-impact peer-reviewed journal
- 2. Giving talk at department seminar and international conference

## Intention to publish date

## Individual participant data (IPD) sharing plan

Participant anonymised data will be made open access. This means that data are made available, free of charge, to anyone interested in the research, or who wishes to conduct their own analysis of the data. The researchers will therefore have no control over how these data are used. No data or responses will be published in which participants can be identified individually. The writing content will not be made open access.

## IPD sharing plan summary

Data sharing statement to be made available at a later date

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Other files			17/02/2023	No	No