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Helping students cope with academic failure: testing techniques to improve stress management and resilience

Submission date	**Recruitment status**	[X] Prospectively registered
23/12/2024	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[X] Statistical analysis plan
30/12/2024	Completed	[_] Results
Last Edited	**Condition category**	[_] Individual participant data
18/03/2025	Other	[_] Record updated in last year

Plain English summary of protocol

Background and study aims
Many students experience stress and emotional difficulties due to academic challenges or failures, such as poor grades. This study aims to test whether certain self-comforting practices, like mindfulness and meditation, can help students manage stress, improve their emotional well-being, and become more resilient in the face of academic failure. The main goal is to see if these practices can help students cope better and feel more in control when facing academic difficulties.

Who can participate?
The study is looking for students from the Global Banking School (GBS) across all campuses (Birmingham, Manchester, Leeds, and London) and partnerships, including Oxford Brookes University (OBU), Canterbury Christ Church University (CCCU), Bath Spa University (BSU), Pearson, University of Suffolk (UOS), and Leeds Trinity University (LTU). Eligible students should be between the ages of 18 and 50+ years who have experienced some form of academic challenge or failure, such as low grades or academic probation.

What does the study involve?
If you choose to participate, you will be randomly assigned to one of two groups. One group will practice mindfulness and meditation for four weeks, where you will attend weekly sessions focusing on breathing exercises, guided meditation, and other relaxation techniques to improve emotional regulation. The other group will continue their normal academic routine without any added support. Throughout the study, you will be asked to complete some questionnaires to measure your stress levels, coping abilities, and emotional well-being. These assessments will be done before, immediately after, and one month after the intervention.

What are the possible benefits and risks of participating?
Benefits: By participating in this study, you may experience improved emotional regulation, better ways of coping with stress, and enhanced resilience in academic settings. It may also help you develop helpful self-soothing strategies that you can continue using in the future.

Risks: There are no significant risks associated with participating in the study. The mindfulness and meditation exercises are safe, but if you have any concerns or discomfort during the sessions, you are free to withdraw from the study at any time.

Where is the study run from?
This study is being conducted at the Global Banking School (GBS) across all campuses and partnerships in the United Kingdom. Sessions will be held on the respective university campuses and will be overseen by researchers from GBS.

When is the study starting and how long is it expected to run for?
April 2024 to June 2025

Who is funding the study?
This study is not funded by any external agency or organization. It is being conducted by the researchers at the Global Banking School and Oxford Brookes University as part of academic research.

Who is the main contact?
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Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Protocol serial number
SCORE-2024-001

Study information

Scientific Title
The effect of self-comforting behaviors on emotional regulation and academic resilience in students facing academic failure: a randomized controlled trial (Self-Comforting and Coping for Resilience and Emotional regulation)

Acronym
SCORE

Study objectives
1. Primary Hypothesis:
Students who engage in self-comforting behaviours, such as mindfulness and meditation, will exhibit greater emotional regulation and higher academic resilience compared to students who do not engage in these behaviours

2. Secondary Hypotheses:
2.1. Students who engage in self-comforting behaviours will demonstrate a significant increase in self-reported self-comforting strategies (e.g., positive self-talk, cognitive reframing) following the intervention, as measured by the Self-Comforting and Coping Scale (SCCS)
2.2. Sociodemographic characteristics, including age and gender, as well as a positive attitude towards self-comforting, will predict higher engagement with the self-comforting intervention and greater improvements in emotional regulation and academic resilience
2.3. Students in the self-comforting behaviour group will report lower levels of stress and greater emotional well-being after the intervention, compared to those in the control group

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 21/05/2024, GBS Ethics Committee (84-86 Smallbrook Queensway, Birmingham, B5 4EG, United Kingdom; +44 7570173055; mcarlile@globalbanking.ac.uk), ref: 2024-REC02-003d-StaffKO

Primary study design
Interventional

Study design
Interventional randomized controlled trial

Study type(s)
Efficacy

Health condition(s) or problem(s) studied
Evaluating the effectiveness of a specific intervention (self-comforting behaviors, including mindfulness and meditation) in improving emotional regulation and academic resilience in students facing academic failure.

Interventions
Participants will be randomized into two arms: the intervention group and the control group. A randomized sampling procedure will be used to assign participants to each group to ensure an unbiased allocation. The randomization process will be conducted using a computerized random number generator to ensure that each participant has an equal chance of being placed in either group. Stratified randomization will be used, if necessary, to account for important sociodemographic variables such as age and gender to ensure balance between groups. The intervention group will engage in a four-week mindfulness and meditation programme, designed to improve emotional regulation and resilience. The programme will consist of weekly

group sessions, led by trained instructors, and will focus on mindfulness practices including breathing exercises, guided meditation, and self-reflection exercises. These practices are aimed at promoting emotional awareness, self-compassion, and the ability to manage stress. The sessions will include both individual and group activities to enhance engagement and foster a supportive environment. The intervention will be designed to address emotional distress caused by academic challenges and to foster a proactive approach to stress management. The control group will consist of students who do not receive the intervention but will continue with their regular academic activities. This group will serve as a comparison to assess the effect of the self-comforting intervention on emotional regulation and academic resilience. The control group will not receive additional support or coping strategies beyond their normal academic routine, which allows for the comparison of self-comforting behaviours against a standard academic experience. The primary outcome will be the change in students' self-comforting behaviours, measured using the Self-Comforting and Coping Scale (SCCS), which assesses the use of self-soothing strategies, including mindfulness, positive self-talk, and cognitive reframing.

Secondary outcomes will include sociodemographic characteristics such as age, gender, and self-reported positive attitudes towards self-comforting. These will be examined to explore their potential influence on the success of the intervention. Additionally, will be measured through self-report questionnaires and other standard scales for emotional well-being. Data will be collected at baseline, immediately post-intervention, and at a one-month follow-up to assess the sustainability of the outcomes. This will allow for an assessment of short-term and long-term effects of the intervention on self-comforting behaviours and emotional resilience.

Updated 06/01/2025:
Secondary outcomes will include sociodemographic characteristics such as age, gender, and self-reported positive attitudes towards self-comforting. These will be assessed using the standard self-report questionnaires, the Self-Comforting and Coping Scale (SCCS) and the Self-Comforting Attitudes Scale (SCAS), to evaluate their potential impact on the success of the intervention. Data will be collected at baseline, immediately post-intervention, and at a one-month follow-up to assess the sustainability of the outcomes. This will allow for an assessment of short-term and long-term effects of the intervention on self-comforting behaviours and emotional resilience. By utilizing novel psychometric tools, the SCORE study is uniquely tailored to rigorously validate both the Self-Comforting and Coping Theory (SCCT) and the Self-Comforting Attitudes Theory (SCAT). These theoretical frameworks emphasize the importance of self-comforting behavioural strategies in promoting emotional wellbeing and academic resilience.

Intervention Type
Behavioural

Primary outcome(s)
Students' self-comforting behaviours, assessed using the Self-Comforting and Coping Scale (SCCS) questionnaire at baseline, immediately post-intervention, and at a 1-month follow-up. This scale assesses the frequency and effectiveness of self-soothing strategies, including mindfulness, positive self-talk, and cognitive reframing.

Key secondary outcome(s)
Measured at baseline, immediately post-intervention, and at a 1-month follow-up:
1. Sociodemographic characteristics (age, gender, educational background, and other relevant factors) will be collected to explore their potential influence on participants' engagement with the intervention and their effectiveness in adopting self-comforting behaviours. These characteristics may provide insights into how personal factors impact the use of coping

strategies and the success of interventions.
2. Self-reported attitudes towards self-comforting will be assessed using the Self-Comforting Attitude Scale (SCAS) to explore potential predictors of intervention success. This 5-point Likert scale assesses participants' beliefs, perceptions, and attitudes regarding the effectiveness and usefulness of various self-comforting behaviours. The attitudes scale includes strategies such as mindfulness, positive self-talk, cognitive reframing, and self-reassurance. Within the context of academic failure, the scale includes items such as 'Mindfulness is an effective strategy for reducing academic stress' and 'I find self-reassurance helpful when dealing with academic failure.' These measures will help identify how attitudes towards self-comforting behaviours may influence the adoption and impact of the intervention.
3. Emotional resilience measured using the SCCS, specifically the subscales related to Coping Strategies, Learning from Failure, Cognitive Reframing, and Mindfulness and Acceptance. These subscales assess participants' use of coping mechanisms, their ability to adapt and learn from academic setbacks, and their emotional awareness and resilience in response to stress.
4. Academic stress levels measured using the Perceived Stress subscale of the SCCS. This subscale assesses the degree to which participants perceive their academic life as stressful, providing insight into their overall experience of academic stress.

Completion date
13/06/2025

Eligibility

Key inclusion criteria
1. Age: Participants must be between the ages of 18 and 50+ years.
2. Enrollment in Academic Program: Participants must be currently enrolled as students at the Global Banking School in Birmingham.
3. Experience of Academic Failure: Participants must have experienced academic challenges or failures (e.g., poor grades, academic probation) in the past year, as the study aims to explore coping strategies in the context of academic stress.
4. Willingness to Participate: Participants must provide informed consent and be willing to engage in the intervention for the full duration of the study (4 weeks).
5. Fluency in English: Participants must have a sufficient level of English proficiency to understand and engage with the intervention materials and assessments.
6. Ability to Commit to Study: Participants must be available to attend all scheduled sessions of the intervention group and complete post-intervention surveys and follow-up assessments.
7. No Severe Mental Health Issues: Participants must not be currently undergoing clinical treatment for mental health disorders (e.g., major depressive disorder, anxiety disorders) that would interfere with their participation in the study.
8. Physical and Cognitive Ability: Participants must be able to engage in mindfulness practices that involve physical posture, breathing exercises, and cognitive reflection, as long as there are no physical or cognitive impairments that would prevent participation.

Participant type(s)
Learner/student

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
50 Years

Sex
All

Key exclusion criteria
1. Severe Mental Health Conditions: Participants currently undergoing treatment for severe mental health disorders (e.g., major depressive disorder, severe anxiety disorders, schizophrenia) or those with a history of such conditions that might interfere with their ability to engage in the intervention.
2. Current Participation in Other Psychological Interventions: Participants who are currently engaged in other psychological interventions, including therapy, counselling, or similar programmes, that may overlap with or confound the effects of the self-comforting intervention being studied.
3. Substance Abuse: Participants who have a history of or are currently struggling with substance abuse or dependency that may affect their ability to engage in or benefit from the intervention.
4. Pregnancy or Postpartum: Pregnant or postpartum participants who may have specific health considerations that could interfere with the participation in meditation and mindfulness activities.
5. Significant Cognitive Impairment: Participants with significant cognitive impairments that would prevent them from engaging fully in the mindfulness and meditation practices, such as severe dementia, brain injury, or other cognitive disorders.
6. Non-English Speakers: Participants who are non-English speakers or have insufficient proficiency in English to comprehend the instructions, intervention materials, or assessments.
7. Physical Disabilities Preventing Participation: Participants with physical disabilities that prevent them from engaging in the physical aspects of the mindfulness and meditation programme, such as those that require specific postures or breathing exercises, unless reasonable accommodations are available.
8. Unwillingness to Commit: Participants who are unwilling or unable to commit to attending all required intervention sessions and completing the necessary assessments throughout the study period.
9. Previous Extensive Mindfulness or Meditation Experience: Participants who have extensive prior experience with mindfulness, meditation, or similar self-comforting behaviours that may already provide them with coping strategies that could confound the results of the intervention.

Date of first enrolment
20/01/2025

Date of final enrolment
14/04/2025

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Global Banking School
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Sponsor information

Organisation
Global Banking School Birmingham

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available due to legal and ethical constraints, including strict institutional regulations. These restrictions are necessary to protect sensitive information and ensure compliance with ethical standards governing the research. The author understands the importance of data transparency and is committed to providing as much information as possible within these constraints.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			30/12/2024	No	Yes
Statistical Analysis Plan			30/12/2024	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes