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Effects of reducing appearance related behaviours on body dysmorphic symptoms in university students at risk of body dysmorphic disorder

Submission date
10/11/2026

Recruitment status
Not yet recruiting

Registration date
10/11/2026

Overall study status
Ongoing

Last Edited
10/11/2026

Condition category
Mental and Behavioural Disorders

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Body dysmorphic disorder (BDD) is a mental health condition in which people worry a great deal about perceived flaws in their appearance and often feel very anxious and ashamed. BDD usually starts when people are teenagers and young adults. Without treatment, it can seriously affect people's lives. People with BDD are more likely to struggle in education and are at higher risk of suicide compared to people without the condition.
There are effective treatments for BDD, but very few people receive treatment when they need it. We urgently need to develop interventions to help people earlier, before they develop BDD. This study aims to test an early intervention strategy for university students who are worried about their appearance, and whose worries are starting to get in the way of their lives. The intervention is based on a treatment already known to work for BDD (namely Cognitive Behavioural Therapy for BDD); it involves a brief 5-minute psycho-educational video, a brief therapeutic technique to practice daily, and daily text reminders. We aim to find out whether the intervention is better at reducing symptoms of BDD compared to an similar control condition.

Who can participate?
People can take part if they:
1. Aged 18 years or older (there is no upper age limit)
2. Are registered UCL students
3. Have elevated but subclinical symptoms of BDD (this means they are unlikely to have BDD but their symptoms are still impairing)
4. Have not started or changed medication for a mental health condition in the past 6 weeks

What does the study involve?
Participants will first complete some questionnaires which assess whether they are eligible to be take part in the study. Then, they will be randomly assigned to either the intervention or the control condition. The group assigned to the intervention will watch a brief (about 5 minutes) video about the role of appearance related behaviours in maintaining appearance related

concerns, are given a brief therapeutic technique to practice daily for 4 weeks and are sent text reminders every day for 4 weeks. Participants assigned to the control condition will also watch a brief video about the role of sleep in appearance anxiety, are given a brief therapeutic technique to practice daily for four weeks and are then sent text reminders every day for 4 weeks, as with the intervention condition. Each week both groups will be asked to complete a brief set of questionnaires. This will allow researchers to assess changes in BDD symptoms, and other mental health symptoms, and whether the participants in the intervention condition report greater improvement in BDD symptoms after 2 weeks compared to the control condition.
We are also interested to see whether the intervention and control are feasible (based on the number of participants recruited and retained in the study), acceptable to participants and are not associated with harmful effects.

What are the possible benefits and risks of participating?
Participants may benefit from taking part if the intervention helps them feel less BDD symptoms, but, this cannot be guaranteed. Any participant who completes all data collection will be entered into a prize draw for £200.
Some participants may find part of the intervention or control condition uncomfortable because it involves changing behaviours, which could lead to temporary feelings of anxiety or discomfort.

Where is the study run from?
University College London (UCL) (UK)

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

Who is funding the study?
UCL Grand Challenge for Mental Health and Wellbeing (UK)

Who is the main contact?
Prof. Georgina Krebs, g.krebs@ucl.ac.uk

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Study information

Scientific Title
Effects of reducing appearance related behaviours on body dysmorphic symptoms in university students at risk of body dysmorphic disorder: a randomised controlled trial

Acronym
REFLECT

Study objectives
1. To evaluate the efficacy of the REFLECT intervention compared to an active control by estimating between group effect size difference on body dysmorphic symptoms at 2 weeks. The effect on secondary outcomes, including depressive and anxiety symptoms, will also be examined.
2. To evaluate feasibility by calculating rates of recruitment and retention to the REFLECT intervention and the control condition
3. To evaluate the acceptability of the REFLECT intervention and the control condition by measuring acceptability and exploring participants experiences of the intervention procedures
4. To evaluate the safety of the REFLECT intervention and the control condition by calculating between group differences in negative effects

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 07/07/2026, UCL Life and Medical Sciences Research Ethics Committee (University College London, Gower Street, London, WC1E 6BT, United Kingdom; +44 (0)20 7679 2000; ethics@ucl.ac.uk), ref: 3666

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Prevention

Study type(s)

Health condition(s) or problem(s) studied
Body dysmorphic symptoms in university students at risk of body dysmorphic disorder

Interventions
Participants will comprise of university students who report elevated but subthreshold body dysmorphic disorder symptoms as assessed by the Body Image Questionnaire (BIQ). Participants will be recruited from a community sample in University College London using physical adverts, digital advertising on platforms including the UCL learning management system - Moodle, and student mailing lists for selected departments within each faculty of the university.

All participants will be recruited into the trial following a screening study where baseline measures are collected. The design of this screening study was informed by three co-design workshops (n = 8 to 10 UCL students each) held in October and December 2025 and January 2026. These workshops aimed to elicit students' views on their needs, preferences and potential solutions to improve recruitment and retention to the study and interventions.

Physical and digital advertisements will include QR codes to enable participants to go directly to the screening study.
Emails will include the link and digital advert, with both enabling the participant to go to the screening study.
In the screening study, participants who score between 20-39 on the BIQ will be able to proceed to the participant information sheet for this randomised controlled trial. Branching logic within the REDCap system will enable this process.

Participants who wish to take part in the study will complete the consent procedure online in the REDCap system to proceed to the trial. All participants will be provided with information about sources of mental health support at UCL, in the NHS and via charities.

The random allocation of participants to either the intervention or control condition in a one-to-one ratio will be conducted within the REDCap system. The randomisation list will be generated in an Excel document by a researcher independent of the trial personnel and incorporated into the REDCap module by this researcher. This list will not be accessible to the trial personnel, reducing the risk of unblinding.

The intervention and control allocation and measures will be concealed within REDCap, thereby ensuring the trial personnel are not unblinded to the intervention assignment.

While participants cannot be blinded to their intervention allocation, the following efforts aim to reduce bias. The intervention and control conditions are similar in terms of credibility scores in a pilot study; credibility scores will be measured following allocation and following delivery of the therapeutic video. Both conditions follow the same structure in terms of activities, timing, form of the therapeutic instruction provided to each participant and the receipt of daily updates for a total of four calendar weeks following baseline.

Due to the brief nature of the intervention, a procedure for emergency unblinding is not required.

Both intervention and control conditions will be delivered digitally, whereby participants can access the brief (~5-minute) psychoeducational video and therapeutic instructions via the

REDCap system. Both the intervention and control videos are as similar as possible in terms of length, text to read, structure, and style. In both the intervention and control condition, the video is followed by daily text reminders over the following four weeks.

Intervention condition:
The intervention condition is informed by CBT for body dysmorphic disorder, which has demonstrated efficacy in reducing appearance-related behaviours and body dysmorphic disorder symptoms (Abdalla et al., 2026). The intervention is theory-based in that it draws on the hypothesised active ingredients from CBT for BDD (Patel & Cougle, 2024; Wilhelm et al., 2013). A putative active ingredient is exposure and response prevention (ERP), which involves reducing appearance-related behaviours. These behaviours are a criterion for the diagnosis of BDD and are thought to maintain appearance preoccupation (Patel & Cougle, 2024; Wilhelm et al., 2013).

The intervention condition is also informed by pilot data and evidence from a randomised controlled trial (Patel & Cougle, 2024). A single-arm pilot study of the intervention was conducted in July 2026, comprising n=29 participants recruited from Prolific. To approximate the age distribution of UCL students, participants were included if aged between 18 and 30 years old. Participants followed the intervention activities of the planned trial: i) viewed a psychoeducational video and therapeutic instructions and ii) were sent daily text reminders for two weeks.

The intervention will be completed by participants either on a computer, tablet or a mobile phone. Within the REDCap platform, participants will be able to view an approximately five-minute psychoeducational video about the role appearance-related behaviours play in maintaining body dysmorphic disorder symptoms. The video concludes with the therapeutic instructions: 1) to identify appearance-related behaviours and 2) to stop appearance-related behaviours over the following four weeks. After the video, a short four-sentence summary of the key points of the video and the task is shown, and participants are asked to take a screenshot of the summary. Participants then receive daily automated text reminders of the task via REDCap for a total of four calendar weeks.

Control condition:
The active control condition is based upon evidence that sleep hygiene interventions are a transdiagnostic target for reducing internalising symptoms (Freeman et al., 2017). The active control condition is based on evidence that sleep problems and body dysmorphic disorder symptoms commonly co-occur (Sevilla-Cermeño et al., 2020). Moreover, there is preliminary observational evidence that insomnia has a negative impact on treatment outcomes among individuals with BDD (Sevilla-Cermeño et al., 2020).

This active control condition follows the same structure as the intervention condition. Participants view an approximately five-minute video about how difficulties sleeping can reduce capacity to respond to body dysmorphic disorder symptoms and can intensify distress. The video has a two-step task: 1) to identify areas of sleep hygiene participants can improve, 2) to improve these behaviours. As with the intervention condition, participants will be provided with a short summary of the key points and the task. The schedule of reminders follows the exact same structure as the intervention condition.

Intervention Type
Behavioural

Primary outcome(s)

1. Body dysmorphic disorder symptoms measured using the Body Image Questionnaire (BIQ) (self-report) at 2 weeks post randomisation

Key secondary outcome(s)
1. Body dysmorphic disorder symptoms measured using the Body Image Questionnaire (BIQ) (self-report) at 4 weeks post randomisation

2. Anxiety symptoms measured using Generalized Anxiety Disorder-7 (GAD-7) (self-report) at 2 weeks and 4 weeks post randomisation

3. Social anxiety symptoms measured using the Mini-Social Phobia Inventory (Mini-SPIN) (self-report) at 2 weeks and 4 weeks post randomisation

4. Eating disorder symptoms measured using the Eating Disorder Examination-Questionnaire (EDE-Q) (self-report) at 2 weeks and 4 weeks post randomisation

5. Depression symptoms measured using the Patient Health Questionnaire-8 (PHQ-8) (self-report) at 2 weeks and 4 weeks post randomisation

6. Functioning measured using the Work and Social Adjustment Scale (WSAS) (self-report) at 2 weeks and 4 weeks post randomisation

7. Recruitment into the trial measured using the number of participants recruited at each month

8. Retention measured using the proportion of participants recruited who remain in the trial at 2 weeks post randomisation

9. Acceptability of the intervention and control conditions measured using the Theoretical Framework for Acceptability (TFA) measure (self-report) at 2 weeks post randomisation

10. Effects of the intervention and control conditions measured using an open text question and the Negative Effects Questionnaire (self-report) at 1 week, 2 weeks, 3 weeks and 4 weeks post randomisation

11. Appearance related behaviours (intervention condition only) measured using the self-report assessment of Appearance Related Safety Behaviours at 1 week, 2 weeks, 3 weeks and 4 weeks post randomisation

12. Sleep hygiene (control condition only) measured using the Sleep Hygiene Index (self-report) at 1 week, 2 weeks, 3 weeks and 4 weeks post randomisation

Completion date
01/12/2027

Eligibility

Key inclusion criteria
1. Aged 18 years and over (there is no upper age limit)
2. Score between 20 and 39 on the Body Image Questionnaire (BIQ)
3. Be a UCL-registered student

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
110 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. BIQ score of less than 20 or 40 and above
2. Not be taking any new or have changed medications for a mental health condition within the previous 6 weeks

Date of first enrolment
12/11/2026

Date of final enrolment
01/11/2027

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
UCL Department of Clinical, Educational and Health Psychology
1-19 Torrington Place
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Sponsor information

Organisation
University College London

ROR
https://ror.org/02jx3x895

Funder(s)

Funder type

Funder Name
University College London

Alternative Name(s)
University College London in United Kingdom, Collegium Universitatis Londinensis, UCL

Funding Body Type
Government organisation

Funding Body Subtype
Universities (academic only)

Location
United Kingdom

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 publicly available repository (e.g., GitHub).

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 1	16/10/2026	10/11/2026	No	No