

Provision of a mindfulness intervention to support university students' wellbeing and resilience to stress: preliminary results of a randomised controlled trial

Julieta Galante, Geraldine Dufour, Maris Vainre, Adam P Wagner, Jan Stochl, Timothy J Croudace, Alice Benton, Emma Howarth, Peter B Jones

Abstract

Background Levels of stress in university students in the UK are high, with an increase in the proportion of students seeking help in recent years. Students report academic pressure as a major trigger. Mindfulness training has been shown to reduce stress and is popular among students, but its effectiveness in this context needs to be ascertained. We aimed to test the hypothesis that the provision of a preventive mindfulness intervention in universities could reduce students' psychological distress during the examination period.

Methods University of Cambridge students free from active crises or severe mental illness were randomised (1:1, automatic remote simple randomisation by random numbers, with automatic concealed allocation) to an 8 week mindfulness course or to mental health provision as usual. Primary outcome was psychological distress during the examination term as measured with the CORE Outcome Measure (CORE-OM). Other outcomes included CORE-OM at postintervention and 1 year follow-up, use of mental health support services, inability to sit exams or special circumstance requests, exam grades, wellbeing, altruism, and coping. At least 550 participants were required to detect a 0.3 SD change in the primary outcome with 90% power. Outcome assessment and intention-to-treat primary analysis with linear modelling adjusted for baseline scores were masked to intervention allocation. We systematically monitored for, and reacted to, adverse events. Independent data monitoring and ethics, and advisory reference committees were set up. This trial is registered with the Australian New Zealand Clinical Trials registry, number ACTRN12615001160527.

Findings 309 students were randomised to mindfulness (median age 22 years [IQR 19.5–24.5], 59% women), and 307 to mental health provision as usual (22 [19.5–24.5], 65%). Students were more distressed (higher mean baseline CORE-OM score) than the average UK student but less so than those attending counselling sessions at the University Counselling Service. Collection of outcome data is continuing.

Interpretation This well-powered pragmatic randomised trial assessing a mindfulness intervention for university students is highly relevant to policy makers. Involving from its inception horizontal coproduction between researchers and stakeholders, it evaluates the provision of a service, and intends to inform student welfare policies in the global context of large increases in participation in higher education.

Funding University of Cambridge Vice-Chancellor's Endowment Fund, the University Counselling Service, and the National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care East of England.

Contributors

GD and AB had the idea for a mindfulness intervention pilot. PBJ, AB, and GD applied for funding for a randomised evaluation. JG and PBJ produced an initial draft of the protocol that was revised through discussion with all the authors. JG, GD, MV, and PBJ conducted the study with the help from the rest of the authors. JG, PBJ, MV, JS, and AW analysed the data. JG is the lead researcher. PBJ is guarantor of the study.

Declaration of interests

We declare no competing interests.

Published Online
November 25, 2016

Department of Psychiatry (J Galante PhD, J Stochl PhD, Prof P B Jones PhD), University Counselling Service (G Dufour MA), and Academic Division (A Benton MA), University of Cambridge, Cambridge, UK; National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care East of England, Cambridge, UK (J Galante, M Vainre MA, A P Wagner PhD, J Stochl, E Howarth PhD, Prof P B Jones); Dundee Centre for Health and Related Research, School of Nursing and Health Sciences, University of Dundee, Dundee, UK (Prof T J Croudace PhD); and Norwich Medical School, University of East Anglia, Norwich, UK (A P Wagner)

Correspondence to:
Dr Julieta Galante,
Department of Psychiatry,
University of Cambridge,
Douglas House,
Cambridge CB2 8AH, UK
mjg231@cam.ac.uk