Modifying the secondary school environment to reduce bullying and aggression: the INCLUSIVE cluster RCT

Chris Bonell, 1* Elizabeth Allen, 2 Emily Warren, 1
Jennifer McGowan, 3 Leonardo Bevilacqua, 3
Farah Jamal, 4† Zia Sadique, 5 Rosa Legood, 5
Meg Wiggins, 4 Charles Opondo, 2 Anne Mathiot, 3
Joanna Sturgess, 2 Sara Paparini, 1 Adam Fletcher, 6
Miranda Perry, 7 Grace West, 3 Tara Tancred, 1
Stephen Scott, 8 Diana Elbourne, 2 Deborah Christie, 9
Lyndal Bond 10 and Russell M Viner 3

Declared competing interests of authors: Russell M Viner is President of the Royal College of Paediatrics and Child Health. Stephen Scott reports grants from King's College London during the conduct of the study. Chris Bonell is a member of Public Health Research Research Funding Board. Deborah Christie reports personal fees from Medtronic plc (Dublin, Ireland), personal fees from Pfizer Inc. (New York, NY, USA) and personal fees from ASCEND (Watford, UK), all unrelated to the submitted work.

¹Department of Public Health, Environments and Society, London School of Hygiene & Tropical Medicine, London, UK

²Department of Medical Statistics, London School of Hygiene & Tropical Medicine, London, UK

³Institute of Child Health, University College London Great Ormond Street Institute of Child Health, London, UK

⁴Department of Social Science, University College London Institute of Education, London, UK

⁵Department of Health Services Research and Policy, London School of Hygiene & Tropical Medicine, London, UK

⁶School of Social Sciences, Cardiff University, Cardiff, UK

⁷World Class Schools Quality Mark, St Albans, UK

⁸Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK

⁹University College London Hospitals NHS Foundation Trust, London, UK

¹⁰College of Health and Biomedicine, Victoria University, Melbourne, VIC, Australia

^{*}Corresponding author Chris.Bonell@lshtm.ac.uk †In memoriam

Published October 2019 DOI: 10.3310/phr07180

Plain English summary

The INCLUSIVE cluster RCT

Public Health Research 2019; Vol. 7: No. 18

DOI: 10.3310/phr07180

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain English summary

Bullying, aggression and violence among young people are important mental health problems. The trial reported here evaluated the Learning Together intervention, which involved school staff and students collaborating on an 'action group' to change school rules and policies and make other changes across the school to make it a healthier place. This included using restorative approaches (which focus on improving relationships) rather than merely punishment-based approaches to discipline and using a classroom curriculum aimed at fostering social and emotional skills. These aimed to reduce bullying and aggression and to promote student health and well-being.

We compared 20 schools in south-east England that were randomly allocated to deliver the intervention over 3 years with 20 schools continuing with existing practices. Schools were provided with an external facilitator to help convene the action group, with all-staff training in restorative approaches and with curriculum materials.

At the start, 6677 students (over 9 in every 10) completed questionnaires. No schools withdrew from the study. When questionnaires were repeated 3 years later, the numbers of students reporting experience of being bullied were significantly smaller among intervention schools than among comparison schools. There was no evidence of a difference in the numbers of students reporting acts of aggression. Students in intervention schools reported having higher quality of life and psychological well-being, lower psychological difficulties and lower chances of having smoked, drunk alcohol, been offered or tried illicit drugs and been in contact with the police in the previous 12 months. The intervention was acceptable to schools and provided strong value for money.

Learning Together is effective across a very broad range of key public health targets for adolescents.

Public Health Research

ISSN 2050-4381 (Print)

ISSN 2050-439X (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

The full PHR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/phr. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

Criteria for inclusion in the Public Health Research journal

Reports are published in *Public Health Research* (PHR) if (1) they have resulted from work for the PHR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in *Public Health Research* are termed 'systematic' when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

PHR programme

The Public Health Research (PHR) programme, part of the National Institute for Health Research (NIHR), is the leading UK funder of public health research, evaluating public health interventions, providing new knowledge on the benefits, costs, acceptability and wider impacts of non-NHS interventions intended to improve the health of the public and reduce inequalities in health. The scope of the programme is multi-disciplinary and broad, covering a range of interventions that improve public health.

For more information about the PHR programme please visit the website: https://www.nihr.ac.uk/explore-nihr/funding-programmes/public-health-research.htm

This report

The research reported in this issue of the journal was funded by the PHR programme as project number 12/153/60. The contractual start date was in March 2014. The final report began editorial review in June 2018 and was accepted for publication in November 2018. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The PHR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the PHR programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the PHR programme or the Department of Health and Social Care.

© Queen's Printer and Controller of HMSO 2019. This work was produced by Bonell et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

NIHR Journals Library Editor-in-Chief

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

NIHR Journals Library Editors

Professor John Powell Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Senior Clinical Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

Professor Matthias Beck Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Senior Scientific Advisor, Wessex Institute, UK

Dr Peter Davidson Consultant Advisor, Wessex Institute, University of Southampton, UK

Ms Tara Lamont Director, NIHR Dissemination Centre, UK

Dr Catriona McDaid Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads Professor of Wellbeing Research, University of Winchester, UK

Professor John Norrie Chair in Medical Statistics, University of Edinburgh, UK

Professor James Raftery Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

Professor Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

Professor Jim Thornton Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Professor Martin Underwood Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk