# Efficacy of a web-enabled, school-based, preventative intervention on bullying prevalence and mental health in children and adolescents

Submission date 14/05/2020	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>[X] Protocol</li> </ul>
<b>Registration date</b> 20/05/2020	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>[X] Results</li> </ul>
Last Edited 06/02/2024	<b>Condition category</b> Mental and Behavioural Disorders	[] Individual participant data

#### Plain English summary of protocol

Background and study aims

Approximately 10-15% of children and adolescents have experienced bullying victimization in their lifetime. Exposure to bullying is associated with an increased risk of mental and physical health problems. Children with disabilities are at greater risk of suffering from bullying and mental disorders. Making anti-bullying interventions web-enabled may increase their applicability to different settings and incur significantly lower costs than traditional interventions.

This project aims to evaluate the efficacy of a specific, web-enabled, school-based bullying prevention intervention in reducing bullying behavior as well as to analyze the effects of such intervention on psychological measures and quality of life in children and adolescents.

Who can participate? Students attending publicly funded primary and secondary schools in the region of Madrid.

#### What does the study involve?

Twenty public schools enrolling children with special educational needs in regular classrooms are randomly allocated to one of two groups. Ten schools will receive a web-enabled, schoolbased preventive intervention targeting bullying behavior and promoting respect to diversity for 12 weeks. This intervention consists of an online training programme for teachers and parents, an educational programme for pupils, and a targeted intervention for victims and bullies. Materials and sessions have been adapted for children with special educational needs.

The other ten schools will not receive any specific intervention besides anti-bullying policies already available in the region of Madrid.

Before the study begins pupils will be invite to complete a web-enabled assessment about bullying behavior that they have experienced or witnessed, their mental health and wellbeing,

and quality of life. This assessment will be repeated after the intervention and then again after 1 year.

What are the possible benefits and risks of participating?

It is expected that the schools and participants may benefit from identifying bullying situations through the online platform in both treatment arms and from the intervention in the intervention arm. The participants may also contribute to improving knowledge of school bullying and development of anti-bullying preventive strategies. This is a minimal risk research study testing a preventive educational programme. There are no expected risks directly derived from the intervention. Adverse events are not assessed at the individual level. If there are negative outcomes at the school level, researchers may decide to terminate the trial.

Where is the study run from?

The study is coordinated by

1. The Department of Research and Psychology in Education, Universidad Complutense (Spain) 2. The Department of Child and Adolescent Psychiatry, Hospital General Universitario Gregorio Marañón (Spain) The trial will be conducted at publicly funded schools in the Madrid sector.

The trial will be conducted at publicly funded schools in the Madrid region.

When is the study starting and how long is it expected to run for? From January 2017 to June 2020

Who is funding the study?

1. Instituto de Salud Carlos III, Spanish Ministry of Science, and Innovation (Spain)

2. The European Regional Development Fund, "A way of making Europe" (EU)

Who is the main contact? Dr. Celso Arango López carango@hggm.es

## **Contact information**

**Type(s)** Public

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#### **Contact details**

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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

Efficacy of a school-based preventative intervention on bullying prevalence and mental health in children and adolescents: a cluster-randomized trial

#### Acronym

LINKlusive

#### **Study objectives**

A web-enabled, school-based preventive intervention targeting bullying and promoting respect for diversity will be associated with a reduction in bullying prevalence, improved mental health and quality of life in children and adolescents receiving the intervention relative to the control group.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 21/01/2019, The Deontology Commission at the School of Psychology of Universidad Complutense (Campus de Somosaguas, 28223, Pozuelo de Alarcón, Madrid, Spain; lelopezb@psi. ucm.es; +34 91 394 3095), ref: 2018/19-005

**Study design** Controlled parallel school-based cluster-randomized trial

**Primary study design** Interventional

**Secondary study design** Cluster randomised trial

**Study setting(s)** School

#### Study type(s)

Prevention

#### Participant information sheet

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

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

Bullying, bullying victimization, mental health

#### Interventions

Twenty public schools are randomised 1:1 to either a preventive intervention or the control condition.

The intervention group receives a school-based web-enabled bullying prevention programme (LINKlusive) over approximately 12 weeks. The intervention consists of three main components: i) an online training programme for teachers and parents, ii) a web-guided educational programme for students, focusing on promoting respect for diversity, empathy, and social skill development, and iii) a web-guided, teacher-delivered, targeted intervention programme for those involved in bullying situations based on peer-support strategies.

The control group receives usual practice (including anti-bullying strategies already in place in publicly funded schools in the Madrid region) for the same period.

Participants are assessed at baseline, after the intervention (12 weeks), and one year after the intervention.

Multi-stage cluster sampling is done among publicly funded schools in Madrid. In a first stage, all schools fulfilling inclusion criteria are selected. In a second stage, these centres are randomised 1:1 to the intervention and control groups. Ten schools (5 primary schools and 5 secondary schools) are offered participation in each cluster, with a list of back-up schools in case of refusal to participate.

#### Intervention Type

Mixed

#### Primary outcome measure

Peer-reported bullying victimization measured using student-provided peer nominations and ratings of their social preferences collected through a web-based platform (www.sociescuela.es) to develop social maps at baseline, 12 weeks, and one year after the intervention ends. Sociescuela is a web-based bullying assessment instrument and is composed of three subscales: i) a victimisation subscale, ii) an acceptance subscale, and iii) a subscale of perceived attributes, which helps identify different victim profiles (e.g. active vs. passive).

#### Secondary outcome measures

1. Self-reported bullying and victimization measured using a self-report questionnaire collected through a web-based platform (www.sociescuela.es) at baseline, 12 weeks, and one year after the intervention ends. This specifically designed questionnaire, assesses different bullying behaviours and their intensity and frequency, and is based on customary bullying definitions and previous questionnaires used in other bullying prevention programmes such as KiVA.

2. Psychological measures of general psychopathology, psychotic-like experiences, depressive symptoms, and self-esteem are measured using questionnaires collected through a web-based platform (www.sociescuela.es) at baseline, 12 weeks, and one year after the intervention ends. General psychopathology is assessed using the self-report Spanish version of the Strengths and Difficulties Questionnaire (SDQ). Internalising and externalising psychopathology are measured with the internalising and externalising subscales of the SDQ. Positive psychotic-like experiences are assessed with the Spanish version of the Community Assessment of Psychic Experiences (CAPE-P15). Depressive symptoms are assessed using nine selected items on the Major Depression Disorder subscale of the Revised Child Anxiety and Depression Scale. Self-esteem is assessed with an adapted version of the Rosenberg self-esteem scale.

3. Quality of life measured using the Spanish version of the KIDscreen-10 via a web-based platform (www.sociescuela.es) at baseline, 12 weeks, and one year after the intervention ends

#### Overall study start date

01/01/2017

**Completion date** 

30/06/2020

## Eligibility

#### Key inclusion criteria

1. Primary and secondary publicly funded schools in the Madrid region where

1.1. Headteacher consent is provided

1.2. Pupils with special educational needs are enrolled in regular classrooms and/or specialized educational services for children with neurodevelopmental disorders are provided

2. Pupils enrolled in participating schools

2.1. Parental consent is given for participation

2.2. Aged 8 to 16 years (primary school grades 3 to 6 and secondary school grades 1 to 4)

3. Teachers at participating schools primary schools, teaching primary school grades 3 to 6 or secondary school grades 1 to 4 who agree to participate in the study

Participant type(s)

Learner/student

**Age group** Child

Lower age limit 8 Years

**Upper age limit** 16 Years

Sex Both

**Target number of participants** 20 schools (10 intervention, 10 control) **Total final enrolment** 20

**Key exclusion criteria** Private or concerted schools will not be included

**Date of first enrolment** 01/11/2018

Date of final enrolment 31/01/2019

### Locations

**Countries of recruitment** Spain

Study participating centre Universidad Complutense de Madrid Department of Research and Psychology in Education School of Psychology Universidad Complutense de Madrid Campus de Somosaguas Ctra. de Húmera Pozuelo de Alarcón Madrid Spain 28223

### Sponsor information

**Organisation** Celso Arango

#### **Sponsor details**

Institute of Psychiatry and Mental Health Hospital General Universitario Gregorio Marañón School of Medicine Universidad Complutense (Instituto de Investigación Sanitaria Gregorio Marañón) IiSGM Center for Biomedical Research in Mental Health Network (CIBERSAM) Madrid Spain 28009 +34 914265006 carango@hggm.es

**Sponsor type** Not defined

### Funder(s)

**Funder type** Government

**Funder Name** Ministerio de Ciencia e Innovación, Instituto de Salud Carlos III

Funder Name European Regional Development Fund

#### Alternative Name(s)

Europski Fond za Regionalni Razvoj, Den Europæiske Fond for Regionaludvikling, Europees Fonds voor Regionale Ontwikkeling, Euroopa Regionaalarengu Fond, Fonds Européen de Développement Régional, Europäischer Fonds für regionale Entwicklung, Európai Regionális Fejlesztési Alap, Fondo Europeo di Sviluppo Regionale, Eiropas Regionālās attīstības fonds, Europos Regionines Pletros Fondas, Europejski Fundusz Rozwoju Regionalnego, Fundo Europeu de Desenvolvimento Regional, Fondul European de Dezvoltare Regională, Európsky Fond Regionálneho Rozvoja, Fondo Europeo de Desarrollo Regional, Eвропейски фонд за регионално развитие, Evropský fond pro regionální rozvoj, Eupωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης, Il-Fond Ewropew għall-Iżvilupp Reģjonali, Evropski sklad za regionalni razvoj, Euroopan aluekehitysrahasto, Europeiska regionala utvecklingsfonden, ERDF, FEDER, EFRE, EΦPP, EFRR, EFRU, ERFi, ETΠA, FEDER, FESR, ERAF, ERPF, ERFA, L-FEŻR, EFRO, EFRR, FEDR, ESRR, EAKR, Eruf

#### Funding Body Type

Government organisation

#### Funding Body Subtype

National government

Location

## **Results and Publications**

#### Publication and dissemination plan

Planned publication in high-impact peer-reviewed journal

#### Intention to publish date

31/12/2020

#### Individual participant data (IPD) sharing plan

The datasets generated during the current study will be available upon request from the principal investigator after de-identification. Individual de-identified data will be available for researchers who provide a methodologically sound research proposal, to conduct the analyses required to achieve the aims included in the approved proposal. These proposals should fulfill all the applicable ethical and legal requirements. To gain access, data requestors will need to sign a data access agreement. Proposals should be directed to carango@hggm.es. This data will become will available immediately after the main paper has been published, with no end date.

#### IPD sharing plan summary

Available on request

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		26/04/2021	17/05/2021	Yes	No
Results article		26/01/2024	06/02/2024	Yes	No