# Application of an intervention based on mindfulness in secondary education

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
10/01/2023	No longer recruiting	∐ Protocol
Registration date	Overall study status	Statistical analysis plan
14/05/2023	Ongoing	Results
Last Edited	Condition category	Individual participant data
08/06/2023	Mental and Behavioural Disorders	<ul><li>Record updated in last year</li></ul>

## Plain English summary of protocol

Background and study aims

In the 21st century, schools need to help students develop their social and emotional skills, but there are problems that are negatively affecting the mental health of both students and teachers. Studies show that mindfulness-based interventions (MBIs) can be used to help prevent emotional and behavioral issues in students and teachers. However, there are limitations in the research on MBIs in schools, such as the use of self-report measures and a lack of comparisons with other treatments. Additionally, there are questions about how to implement MBIs more effectively and sustainably in schools, especially in vulnerable communities.

This study aims to address these gaps in research by training teachers in mindfulness and evaluating the impact on both their own mental health and the mental health of their students. The study will use a mix of methods, including a randomized controlled trial, to explore how the teaching and learning process is affected by mindfulness practices. Researchers will also investigate the attitudes of both teachers and students towards mindfulness. The goal is to develop an intervention that is effective, sustainable, and adaptable to the needs of Chilean adolescents, and can be scaled up as a public policy.

Overall, this study focuses on an important topic, especially in light of the pandemic: the mental health and well-being of students and teachers. By identifying effective ways to develop socioemotional skills in schools, the project aims to contribute to the mental health programs and guidelines developed by the Chilean government.

#### Who can participate?

Students and teachers from all municipal schools that have secondary education and have a vulnerability index of the commune of Valdivia, Chile.

#### What does the study involve?

Teachers received 8 weeks of mindfulness training adapted for schools. Afterwards, they were randomly assigned to receive either mindfulness teacher training or pedagogical planning training. They then received a refresh and enabling training. Finally, teachers made their pedagogical planning for the whole semester focused on the training provided and delivered teaching for 12 weeks over a period of 6 months.

What are the possible benefits and risks of participating?

The participation does not imply physical or psychological risks, except the possibility of feeling uncomfortable when answering some questions from the questionnaires or from the researchers.

The participants will receive training in mindfulness skills at no cost, which can help them, for example, to manage stress and relate better to other people and themselves as well as the environment.

Where is the study run from? Universidad Austral de Chile (Chile)

When is the study starting and how long is it expected to run for? June 2021 to March 2026

Who is funding the study? Agencia Nacional de Investigación y Desarrollo (Chile)

Who is the main contact?

Dr Alvaro Langer, alvaro.langer@gmail.com

# Contact information

#### Type(s)

Principal Investigator

#### Contact name

Dr Álvaro Ignacio Langer Herrera

#### **ORCID ID**

http://orcid.org/0000-0003-2983-5274

#### Contact details

Independencia 642 Valdivia Chile

+56 956693284 alvaro.langer@gmail.com

# Additional identifiers

**EudraCT/CTIS** number

Nil known

**IRAS** number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

# Study information

#### Scientific Title

Application of an intervention based on mindfulness in secondary education. Impact on teaching-learning processes and on the promotion of mental health and well-being of teachers and students

#### **Study objectives**

At the end of the intervention, the students will have better mental health and well-being in their schools receiving the mindfulness intervention with teachers who attended the extended training than in the schools with teachers who attended the brief training. Likewise, the researchers expect that the teachers in the schools where the extended training will be carried out, present better mental health than in the schools that receive the brief training. Finally, the mindfulness skills of students and teachers will improve more in those schools where the extended training will be conducted.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 06/05/2022, Ethics Committee of Universidad Austral de Chile (Independencia 631, Valdivia, Los Ríos, Chile; +56 632444314; comiteeticocientifico@uach.cl), ref: 1221034

#### Study design

Two-arm single-blind cluster-randomized controlled study

# 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 the contact details to request a patient information sheet.

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

Impact on teaching-learning processes and on the promotion of mental health and well-being of teachers and students in secondary education in vulnerable settings

#### **Interventions**

Current interventions as of 08/06/2023:

- 1. 8 weeks of Mindfulness training adapted for schools (Guillermo Sepúlveda), 12 hours
- 2. After the 8 session training for the whole group of participants, participants were randomly assigned to receive either:
- Teacher Training I: MindfulnessTeacher Training for implementation (3 day training, 19./20./21. 12.22 from 9:00 a.m. to 05:30 p.m), (Guillermo Sepúlveda, Soledad Cano, Vanessa Nowak), 21 hours. OR
- Teacher Training I + Teacher Training II: Pedagogical Planning Training (3 day training, 26./27. /28.12.22 from 9:00 a.m. to 05:30 p.m) (Carolina Iturra), 21 hours
- 3. Refresh and Enabling Training (29.03.23 from 9:00 a.m. to 1:30p.m) (Guillermo Sepúlveda, Vanessa Nowak), 4 hours
- 4. Teachers then made their pedagogical planning for the whole semester focused on the training provided and delivered the teaching in 12 weeks over a period of 6 months

#### Previous interventions:

- 1. 8 weeks of Mindfulness training adapted for schools (Guillermo Sepúlveda), 12 hours
- 2. After the 8 session training for the whole group of participants, the two groups of teachers were randomly assigned to receive either:
- Teacher Training I: MindfulnessTeacher Training for implementation (3 day training, 19./20./21. 12.22 from 9:00 a.m. to 05:30 p.m), (Guillermo Sepúlveda, Soledad Cano, Vanessa Nowak), 21 hours, OR
- Teacher Training II: Pedagogical Planning Training (3 day training, 26./27./28.12.22 from 9:00 a. m. to 05:30 p.m) (Carolina Iturrra), 21 hours
- 3. Refresh and Enabling Training (29.03.23 from 9:00 a.m. to 1:30p.m) (Guillermo Sepúlveda, Vanessa Nowak), 4 hours
- 4. Teachers then made their pedagogical planning for the whole semester focused on the training provided and delivered the teaching in 12 weeks over a period of 6 months

#### Intervention Type

Behavioural

#### Primary outcome measure

Mental health and well-being in students at baseline, after intervention and follow up at 12 months and 18 months:

- 1. Mental health measured using PHQ-9 and GAD 7
- 2. Well-being measured using the Psychological Well-Being Scale

#### Other measures:

- 3. Child and adolescent mindfulness measure: CAMM
- 4. Spanish version of the avoidance and fusion questionnaire for youth short-form: AFQ-Y8
- 5. Emotion regulation questionnaire for children and adolescents: ERQ-CA
- 6. Psychological well-being scale short-form for children and adolescents: PWB-SF-Y
- 7. Gratitude questionnaire: GQ6
- 8. Child health utility 9D: CHU-9D
- 9. Self-compassion scale short-form for adolescents: SCS-SF

## Secondary outcome measures

Mental health and well-being in teachers at baseline, after intervention and follow up at 12 months and 18 months:

- 1. Mental health measured using PHQ-9 and GAD 7
- 2. Well-being measured using the Psychological Well-Being Scale

#### Other measures:

- 3. FFMQ (Five Facets Mindfulness Questionnaire
- 4. ERQ (Emotion Regulation Questionnaire)
- 5. GQ-6 (Gratitude Questionnaire)
- 6. Patient-Reported Outcomes Measurement Information System (Promis)
- 7. MBI Questionnaire (Maslach Burnout Inventory)
- 8. AAQII (Acceptance Action Questionnaire)
- 9. Utrecht Work Engagement Scale (UWES)
- 10. Self Compassion Scale (SCS)

#### Overall study start date

30/06/2021

#### Completion date

03/03/2026

# **Eligibility**

#### Key inclusion criteria

Students and teachers of all municipal schools that have secondary education (1 to 4 secondary), with two or more courses per year that have a vulnerability index of the commune of Valdivia, Chile.

# Participant type(s)

Mixed

#### Age group

Mixed

#### Sex

Both

# Target number of participants

1,008

#### Key exclusion criteria

Does not meet inclusion criteria

#### Date of first enrolment

28/04/2022

#### Date of final enrolment

30/04/2024

# Locations

#### Countries of recruitment

# Study participating centre Instituto Comercial Valdivia

Pérez Rosales 774 Valdivia Chile 5110615

# Study participating centre Colegio Teniente Hernan Merino Correa

Valle Hondo 2915 Valdivia Chile 5110615

# Study participating centre Liceo Santa María la Blanca

Arauco 642 Valdivia Chile 5110615

# Study participating centre Instituto Italia Valdivia

Av. Francia 2670 Valdivia Chile 5110615

## Study participating centre Liceo Técnico Valdivia

Av. Ramón Picarte 2305 Valdivia Chile 5110615

# Sponsor information

### Organisation

Universidad Austral de Chile

## Sponsor details

Independencia 631 Valdivia Chile

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+56 63 2221324 institutopsicologiaval@uach.cl

# Sponsor type

University/education

#### Website

http://www.uach.cl

# Funder(s)

## Funder type

Government

#### Funder Name

Agencia Nacional de Investigación y Desarrollo

#### Alternative Name(s)

Agencia Nacional de Investigación y Desarrollo de Chile, National Agency for Research and Development, Government of Chile, Chilean National Agency for Research and Development, ANID

# **Funding Body Type**

Government organisation

# Funding Body Subtype

National government

#### Location

Chile

# **Results and Publications**

# Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

# Intention to publish date

# 31/07/2026

# Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Alvaro Langer, alvaro.langer@uach.cl

# IPD sharing plan summary

Available on request