Promoting children's and adolescents' mental wellbeing in sub-Saharan Africa

01/08/2022-31/07/2026

Policy Event

15 May 2026

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

8.30 – 9.00	Registration and Networking
9.00 – 9.20	Opening and Welcome
9.20 – 9.25	Mindful Practice
9.25 – 10.15	Keynote lecture
10.15 – 10.45	Community Engagement and Involvement
10.45 – 11.15	Coffee break
11.15 – 11.45	The Bridge in Practice: How Mindfulness Can Work
11.45 – 12.30	Cultural Adaptations and Future Routes
12.30 – 13.00	Summing up and the way forward
13.00	Networking lunch

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

1495 UNIVERSITY OF ABERDEEN

ADDIS ABABA UNIVERSITY

UNIVERSITY of RWANDA

8.30 – 9.00am Registration & Networking

9.00 – 9.20am Opening & Welcome

FUNDED BY NIHR | National Institute for Health and Care Research

UK International Development
Partnership | Progress | Prosperity

9.20 – 9.25am Mindful Practice led by Isaie Manirihose

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

Project's main objective

To develop, implement and evaluate an affordable, effective, and trusted mindfulness intervention delivered in schools to improve the mental well-being of children and adolescents in Rwanda and Ethiopia.

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

The Biological Unlock - Beyond Structural Inputs to Cognitive Readiness

Prof. Pamela Abbott (presented by Dr. Rachel Shanks)

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

Rwanda has built the schools, designed the curriculum, and identified the vulnerable.

Our research suggests there is now a need to address the biological readiness of the child to engage with these systems. Mindfulness is the 'software update' that allows the 'hardware' of our schools to function for every child, regardless of their background; to enable every child to attain their full potential.

The Biological Unblock: Creating the Conditions for Studying

Early Adversity
Poverty
Hunger
Harsh discipline
Household instability

Neurobiological Effects
Hyper-arousal
Impaired executive functions
Reduced working memory

The Cognitive Tax
Difficulty concentrating
Emotional reactivity
Low persistence
Struggles with studying

BIOLOGICAL UNREADINESS TO LEARN

Can't sustain attention

Can't regulate emotions

Can't settle to study

Easily overwhelmed

BIOLOGICAL UNBLOCK

Self –Regulation
Calmer physiology
Improved emotional control

Cognitive Readiness
Better attention
Greater working memory capacity

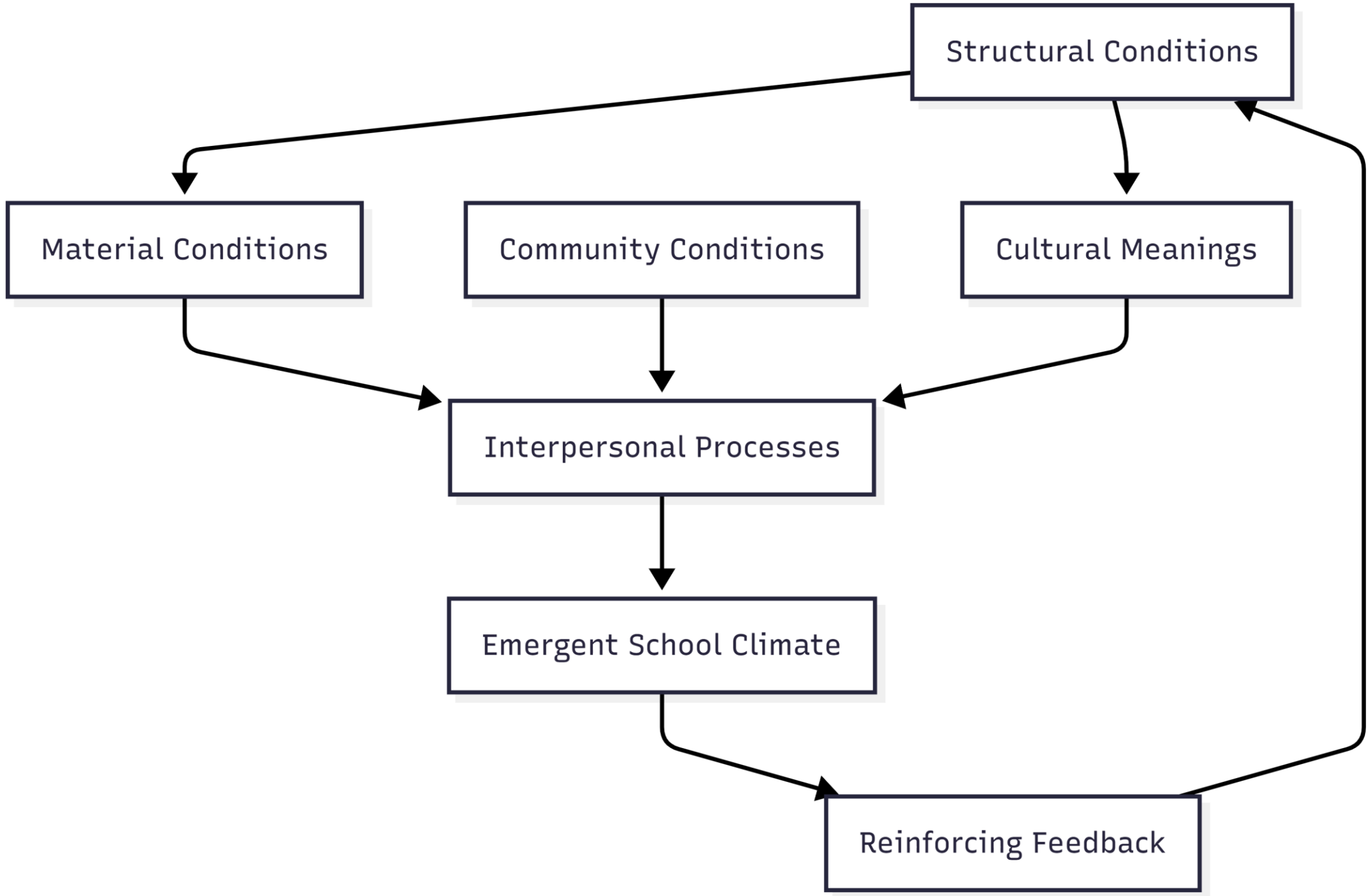
Studying Becomes Possible
Can settle and study
Longer task persistence
Better retention
Improved performance

The Policy Gap

- Education and health policies acknowledge the importance of nutrition for children benefiting from schooling but do not address the deeper generative mechanisms through which early deprivation shapes neurobiological development and later vulnerability.

- School meals improve immediate functioning but cannot reverse the neurobiological effects of early adversity; interventions that strengthen regulatory capacities would be required to engage those mechanisms.

- Health Sector Strategic Plan Five (HSSPV)
- Rwanda Mental Health Strategic Plan launched 2020 – implemented from 2022
- To meet policy aims we need complementary interventions to address the 'Cognitive Tax' of impaired executive functioning, emotional regulation, and sustained attention to ensure that pupils can benefit from education and enjoy their childhood.


Structural Conditions
Material Conditions
Community Conditions
Cultural Meanings
Interpersonal Processes
Emergent School Climate
Reinforcing Feedback

How School Climate Reproduces Itself

T1 Structural and cultural conditioning

T2 Everyday social interaction shaped by

T3 Structural and elaboration and reproduction

Feedback to next cycle

Resource constraints,
Staffing instability,
Community adversity
Dominant expectations and norms

→ These conditions shape how teachers and pupils interact

Stress and norms
Conflict cycles and mistrust
Coping strategies (avoidance, harsh discipline)

→ These interactions reinforce the existing culture

Mostly reproduction
Occasional small improvements by specific agents

→ System feeds back into the next cycle

Reinforces initial structural and cultural meanings

Mindfulness as the ‘Neural Bridge’ to learning

- Mindfulness gives pupils tools that they can use to regulate their concentration, their emotions and their behaviour.
- When pupils can self-regulate classrooms are calmer and teachers are less stressed.
- Pupils are more focused on learning, teachers more focused on teaching, and there is more learning time.
- Pupils’ attainment improves, repetition and dropout deceases and on-time completion increases.
- Mindfulness strengthens teacher wellbeing, reducing stress, absenteeism, and turnover, and supporting a more stable and effective workforce.

Pathways to Wellbeing

Pathway 1: Direct benefits for some pupils

This is the familiar, selective pathway the literature tends to emphasise. It includes:

- improved emotional regulation for pupils who are already receptive;
- reduced stress or anxiety for those who engage deeply;
- short-term improvements in mood or calmness.

This pathway is contingent, uneven, and dependent on individual readiness and context. These effects do not generalise, do not last, and do not occur without supportive relational and contextual conditions.

Pathway 2: Indirect, relational benefits for all pupils and teachers

This is the pathway our analysis elevates to the centre of the programme theory. It includes:

- improved classroom climate
- more attuned teacher–pupil interactions
- teachers experiencing reduced stress and greater relational presence
- pupils becoming more able to *benefit from schooling* (attention, readiness, relational safety)
- a shift in the micro-culture of the classroom

This pathway works through relationships and classroom culture, is shaped by the school context, and aligns directly with how learning happens — making it an educational intervention rather than a health intervention.

Mindfulness: A Tool for Positive Discipline: Reducing Reliance on Harsh Discipline

- Our research provides a practical alternative to punitive discipline.
- The disciplinary alternative: At our intervention school, the Headteacher reported a near-total collapse in disciplinary referrals, with few such referrals occurring since the mindfulness intervention began.
- De-escalating the Classroom: By addressing the proximate cause of disruption - pupil hyper-arousal - the intervention removes the primary triggers for teacher frustration.
- The Discipline Alternative: When pupils can reflexively focus and self-regulate, the need for ‘punitive’ measures falls away naturally. Mindfulness transforms the school into a site of co-regulation.

Alignment with National and International Frameworks

A whole school mindfulness intervention is potentially a low-cost, high-impact tool that directly supports:

- The realisation of Vision 2050.
- WHO Health Promoting Schools Initiative: Providing a concrete mental health tool for the school environment.
- Competence-Based Curriculum (CBC): Delivering the mandated ‘Generic Competences’ of self-regulation and interpersonal relations.
- School Feeding Programs: Ensuring pupils are emotionally regulated enough to benefit from nutritional inputs.
- Health Sector Strategic Plan Five (HSSPV)
- Rwanda Mental Health Strategic Plan
- Adolescent mental health: Giving young people strategies they can use to deal more effectively with the stressors and challenges they encounter as they transition to adulthood.

Community Engagement and Involvement

Prof. Laetitia Nyirazinyoye

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

School-Based Mindfulness Intervention (SBMI) Background

The SBMI is a universal, curriculum-integrated Programme introducing age-appropriate mindfulness practices:

- Strengthen learners' attention, emotional regulation, and prosocial skills,
- Enhance wellbeing and foster supportive classroom dynamics

CEI Design:

1) **Reference Groups (RG):**

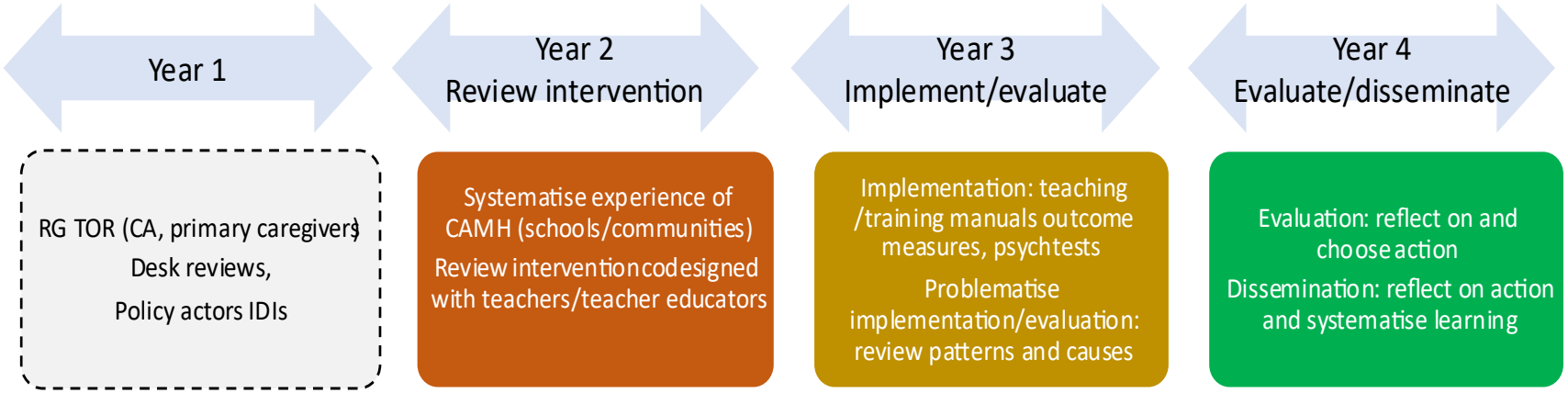
- To inform the design, implementation, and evaluation of the intervention
- To ensure that the perspectives of direct recipients are included at all stages of the research for CA and primary caregivers to work closely with researchers.

2) Community Advisory Boards (CABs):

- To serve as a voice for the community.
- To provide input into study design and local study procedures.
- To ensure that research strategies acknowledge and respect cultural/ethnic values and differences.

CEI Design:

Reference Groups/CABs Framework



	Year 1	Year 2	Year 3	Year 4
Children and adolescents	Meet 6x in Year 1 (unused)	2 meetings: Dec 2023/Jan 2024 Feb-June 2024	2 meetings: Aug 2024– Jan 2025	2 meetings: Aug 2025– Jul 2026
Primary caregivers		2 meetings: Dec 2023/Jan 2024 Feb-June 2024	2 meetings: Aug 2024– Jan 2025	2 meetings: Aug 2025– Jul 2026
CABs		2-4 meetings	2-4 meetings	2-4 meetings

CEI Design

Inclusion characteristics	Exclusion characteristics
Children and adolescents	**Children and adolescents**
People residing in target population who are recipients of the intervention Children 7-16 years Children in the intervention school Children in range of education stages (9 year basic school grades 1-9 in Rwanda Girls will have equal representation with boys	Reasonable possibility of loss to follow up (e.g., familial commitments, chaotic and/or unstable personal circumstances, existence of severe or acute health condition that is likely to preclude participation) Prisoners, people in detention or involuntary treatment People who present a risk of physical aggression and/or harm Girls will have equal representation with boys
Caregivers	**Caregivers**
People residing in target population who are recipients of the intervention People >=18 years Primary caregivers, carers and/or guardians (includes adoptive primary caregivers, kinship carers) Primary caregivers of children 7-16 years Primary caregivers of children in the intervention school Primary caregivers of children in range of education stages (9 year basic school grades 1-9 in Rwanda; primary school grades 1-6 in Ethiopia)* Women will have equal representation with men	Reasonable possibility of loss to follow up (e.g., familial commitments, chaotic and/or unstable personal circumstances, existence of severe or acute health condition that is likely to preclude participation) Prisoners, people in detention or involuntary treatment People who present a risk of physical aggression and/or harm Women will have equal representation with men

CEI in practice

- Reference Groups (RGs): purposively selected from intervention schools with attention to gender, diversity, and the inclusion of marginalized voices, comprised children and caregivers.

- Community Advisory Boards (CABs): local leaders, child rights advocates, and service providers, supported respectful community entry and alignment with governance structures.

CEI in practice: Reference Group (RG)

1) Children and Adolescents (9-16 yrs old) RG:

   12 participants

   - purposively selected from intervention schools (P4-P6)
   - 6 male and 6 female

2) Parents and caregivers

   12 participants

   - Parents or caregivers of children 9-16
   - 6 male and 6 female members

➔Consented and assented to participation

CEI in practice:
Community Advisory Board (CAB)

A Community Advisory Boards (CABs):

- 13 members purposively identified and recruited including
- Burera District Vice Mayor in charge of Social Affairs,
- Church representatives,
- Parents and teachers' representatives (PTA)
- Social services providers and volunteers (IZU, CHWs, youth council leaders, etc.)

CEI in practice:
Community Advisory Board (CAB)

CAB meeting held in April 2024

CEI in practice: Implemented in 4 phases

1. Mental Health problems needs assessment
2. Review of the SBMI draft intervention (exercises)
3. Refining data tools
4. Appraising findings, and co-developing dissemination.

CEI in Practice: Ownership (1)

Community members' representative joined the NIHR Rwanda Research Teams follow a Health Center nurse from Burera District:

- ✓ Participation in all research workshops (in country and internationally)
- ✓ Attendance in field workers trainings
- ✓ Supervision of the data enumerators for the feasibility ad actual surveys
- ✓ Implementation of In-class observation of SBMI activities and in-depth interviews

CEI in Practice: Ownership (2)

- ✓ Facilitation of FGD, CAB, and Reference Groups with children, parents, and leaders
- ✓ Qualitative data management and quality checking: transcribing and data translation from Kinyarwanda to English
- ✓ Recruitment of study participants
- ✓ Identification and contact of local stakeholders to participate in Key Informant interviews.
- ✓ Experience sharing and dissemination with the research team.

CEI in practice: Rwanda

RGs as trusted spaces:

- Children reported mindfulness at home, taught parents, reminded teachers to open lessons with mindfulness
- Parents: reported warmer relationships, less corporal punishment; teachers: shifts from discipline to encouragement

CAB/RG advocacy for curriculum integration, community as co-authors of embedding strategy

Community ownership:

By Sept 2025, children were confident they could maintain SBMI after the project ends and recommended training new teachers themselves

CEI in practice: Rwanda

“Before we were introduced to mindfulness, my mind was often overwhelmed with thoughts. I used to worry about my parents punishing me when I got home. Even though I was in class, I wasn’t really listening… Now, before lessons begin, we do the hands-on desk exercise, which helps me stay focused.”
Student, children’s RG, Rwanda, April 2025

“Our teachers used to speak to us in a harsh manner, but since mindfulness was introduced, they now treat us kindly.”
Student, children’s RG, Rwanda, April 2025

Photo from the meeting between CAB members and research team

KEY IMPACT OF THE CEI IN RWANDA

The CEI generated four key impacts:

(1) **Culturally-grounded adaptation:** The groups helped determine whether the mindfulness intervention is acceptable culturally, appropriate for schools and families, is understandable to children, caregivers, and teachers as well as about its feasibility within local school systems;

(2) **Enhanced legitimacy and trust:** The RGs were spaces to report intervention effects, which in turn strengthened support for the intervention;

KEY IMPACT OF THE CEI IN RWANDA

(3) Co-produced implementation and analysis: parents and teachers in Rwanda advocated for the SBMI's integration into the curriculum, while CAB and RG feedback shaped data tools and dissemination strategies;

(4) Layered foundation for sustainability: Sustained engagement with National Stakeholders anchoring the intervention in policy and practice and fostering interest in national scale-up.

CONCLUSION

- The model shifted beyond consultation to deliberative governance, redistributing influence to those most affected.
- Informed by political economy, the approach ensured the SBMI reflected local priorities and supported integrity.
- CAB and RG members reported greater confidence to advocate for mental health.
- Elevating perspectives of children, adolescents, and caregivers, this model offers a transferable strategy for inclusive engagement in global health research.

10.45 – 11.15am Coffee Break

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

The Bridge in Practice: How Mindfulness Can Work

Niamh Bruce, Emilienne Kiberinka and Fidele Niyitegeka

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

Neural bridge and Mindfulness

Neural Bridges make connections enhancing emotional regulation, focus, and mental well-being.

Theory of Attention in Psychology = 

Mindfulness is not simply paying attention

Only part of it.

Intention comes first – choice and understanding – leading to self regulation

Attention – on the present moment

Attitude – non judgemental, open awareness with curiosity and **kindness**

Compassion woven throughout

To assist we use anchors for our attention

- Breath
- Body
- Senses

- These are the anchors to rest our attention in the present moment non judgementally and with kindness
- They act as neural bridges connecting mind, emotions and physical sensations

- You have heard the science and the literature review

- But how does our intervention
  - Attempt to create these neural bridges
  - Affect change in the school environment/ climate

- How do the practices create tools that children can keep

How our Intervention can create Neural Bridges

The Key is in the Practices

Why in schools?

- Access – also impact on society
- Benefit of building blocks
- Environment to use the building block
- Neuroplasticity at all ages but most flexible when young

Our Building Block

Hands On Desk

This is our **building block** of the programme

All other practices build from there

Beginning of every lesson – why then?

Forms the basis/foundation of all other practices.

Slowly integrated

Transitions

Arrival at School – **Welcome Drums**

Between Subjects – **Hands on Desk**

Lunchtime – **Mindful Eating**

Moving around the school - **Corridors or Stairwells Practice**

Journey to and from School – **Tree Noticing Practice**

Change **School** with **Work** and **Subjects** with **Tasks –** where is your attention in these places?

Let me show you with the Welcome Drums!

Switching off Auto Pilot

- Applying to everyday tasks
  - Journeys
  - Transitions
  - Eating
  - Learning
  - Sport

Nature and Ubuntu

- Anchor of Senses

- Mindful Eating
- Mindful Planting
- Tree Noticing Practice
- **Ubuntu** – ‘I am because we are’
  - Interconnection wrapped in kindness
  - Neural bridges - deeper connections

Self regulation

- Teacher guides, <u>not forces,</u> but each student is training **their own attention**.

- Equipping the students with the tools to practice at any point

- Soon children also lead
- Here you will see a student from senior 1 lead a HOD to her classmates

Child from P2 in the Intervention School

Our Practices works towards:

Developing the ability to **Pause, Observe** and **Listen** for both Teachers and Students

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

To Observe, not just see.

To Listen, not only hear.

To Belong, To Connect With

Not simply attend school,

School Can be a Safe Place,

A Place to Belong,

A Place to Connect,

A Place of Welcome for all Staff, all Students.

A Place to be Present

Cultural Adaptations and Future Routes

Niamh Bruce, Ali Kaleeba, François Nkurunziza and Kesia Ahobamfatiye

FUNDED BY NIHR | National Institute for Health and Care Research

UK International Development
Partnership | Progress | Prosperity

Cultural Adaptation of the Programme

- The intervention was culturally adapted for Rwanda and Ethiopia. Rural and Urban settings.
- It was designed for all students in the schools, including mixed abilities
- It was developed as a secular intervention to be used across different school settings.
- The practices were designed to fit into existing school timetables with least disruption attempting to work in large class sizes.
- It required only limited materials and basic teacher training – Cost Effective Approach .
- It was aligned with local priorities such as reforestation, peace education,
- As a sub-Saharan project, it used the African philosophy of Ubuntu rather than Buddhist teachings.
- Trauma informed mindfulness concepts and theory was adhered to in the development.
- Sensory foraging Research and Compassion are key elements and complimentary.
- Discipline and Mindfulness

Open access materials

- Training manual for teachers
- Video materials - demonstration & Testimonial
- Audio materials for Breath practices
- Posters on some mindfulness practices in the classrooms
- Scripts for some of the practices
- Power Points and Agendas for Teacher Training
- Practices log for every teacher

The above materials are translated into Amharic and Kinyarwanda language with subtitles on some.

Materials future schools would need to fund

- Bulbs/Seeds for planting practice
- Strawberries/bananas for the classes doing Mindful Eating
- Speaker for welcome music
- Welcome Banner

What Next?

- 3 Schools are trained – now they have the tools to continue

- Our Programme is at foundational level
- Building Blocks that can be used in schools but built upon in other services.
  - Medical Services
  - University
  - Mental Health Services

Suggested Future Routes

- A strong foundation is already established in the 3 participating schools.
- We have the materials for teachers and learners.

If the project's findings show strong benefit, then our recommendation is to scale up:

- Using existing structures and several routes to implementation (Opportunity to pilot before nationwide)
- University of Rwanda-College of Education
- 3 Schools - School Clubs
- Teacher Training College Kirambo
- Other pilots possible, including training within existing CPD structure (including non-payment)

What Next?

- Teacher Training Colleges (TTC)
- One of the effective routes

- Sports subjects

- Foundations of Education

- Story Telling in Primary School (TTC or CPD)

TTC in Burera District. Teacher Educators Anatole and Kesia. TTC Principal, Brother Emmanuelle, Niamh and Janette TTC Student Counsellor

- University of Rwanda College of Education
  - CPD Certificate / Diploma programs
  - An integral component in the existing pre-service and in-service programs – Educational psychology programme, School Guidance and counselling module, Physical education and sports combination

- Other Higher Education teacher training institutions

- The above needs relevant adaptation

- REB – Co-curricular activities in the CBC, e.g., Sports in primary and secondary
- National ITORERO Commission (NIC)-Mindful stories, self-compasion , etc)
- Pedagogy (CPD) Days
- School Clubs (National and local)
- School-based mental health programme (7 districts)
- Education-based not therapeutic but can be adapted and built on, for example with Community Health Workers

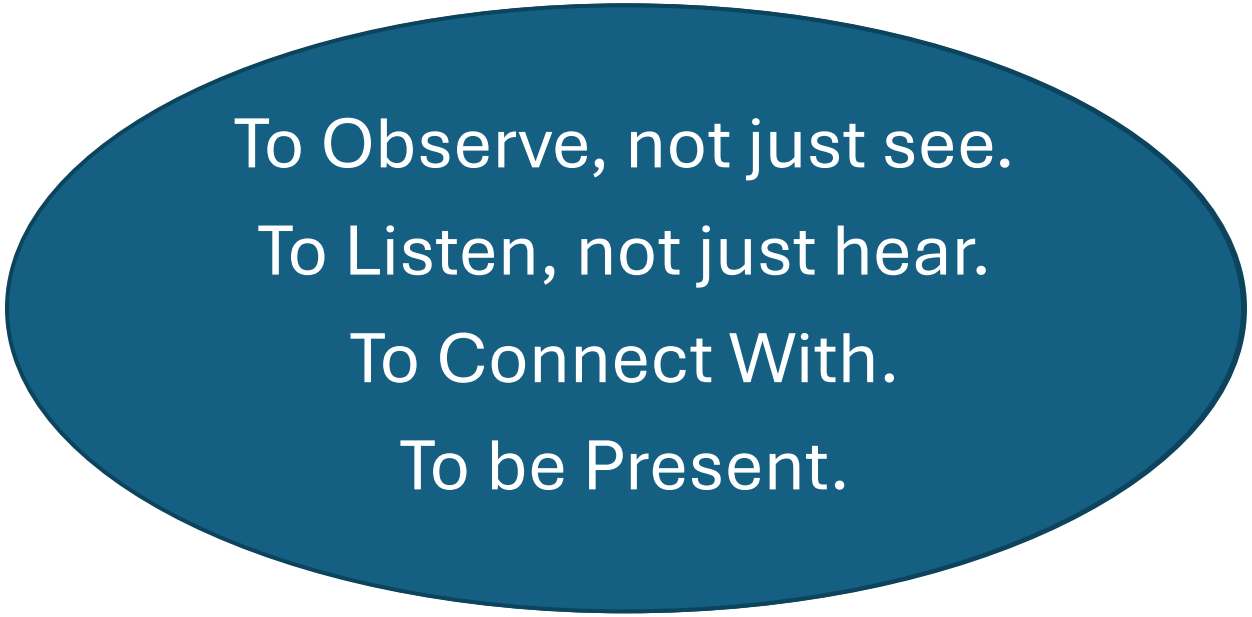
Community Health Workers

- We have a model for schools (both students and teachers)
- With Easy adaptation – we could find a fit for CHW
- Strong research evidence of Mindfulness used in Health care settings.
- MBSR – a hospital based mindfulnes programme for chronic pain – Jon Kabat Zinn, University of Massachusetts Medical Centre 1979

Why mindfulness for CHWs /Community members?

- Stress reduction & burnout prevention
- Improved patient care – developing empathy and compassion and presence
- Community building & Trust
- Evidence based benefits

The Schools Model could be adapted into a Community Health Workers Model



Summing up and the way forward

Prof. Wenceslas Nzabalirwa

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

Thank you for your attention

13.00 Networking Lunch

FUNDED BY
NIHR | National Institute for Health and Care Research
UK International Development
Partnership | Progress | Prosperity

Acknowledgement

FUNDED BY

NIHR | National Institute for Health and Care Research

UK International Development

Partnership | Progress | Prosperity

This research was funded by the NIHR (NIHR133712) using UK aid from the UK Government to support global health research. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR or the UK government, the Court of the University of Aberdeen, the Board of Directors of the University of Rwanda, the Board of Directors of Addis Ababa University, or our International Advisory Board