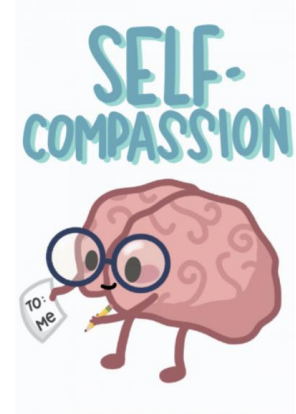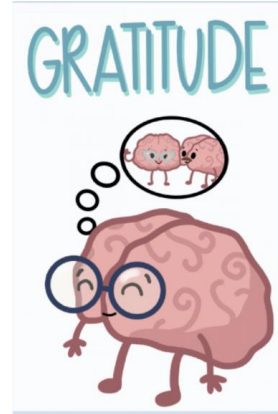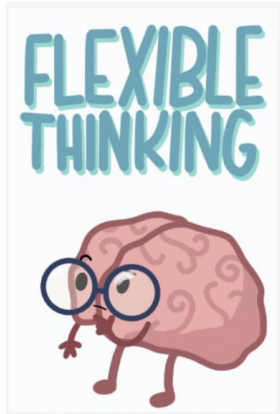# The Common Elements Toolbox (COMET):
A Single-session Intervention for Resilience, Mental Health, and Wellbeing

Akash Wasil

University of Pennsylvania
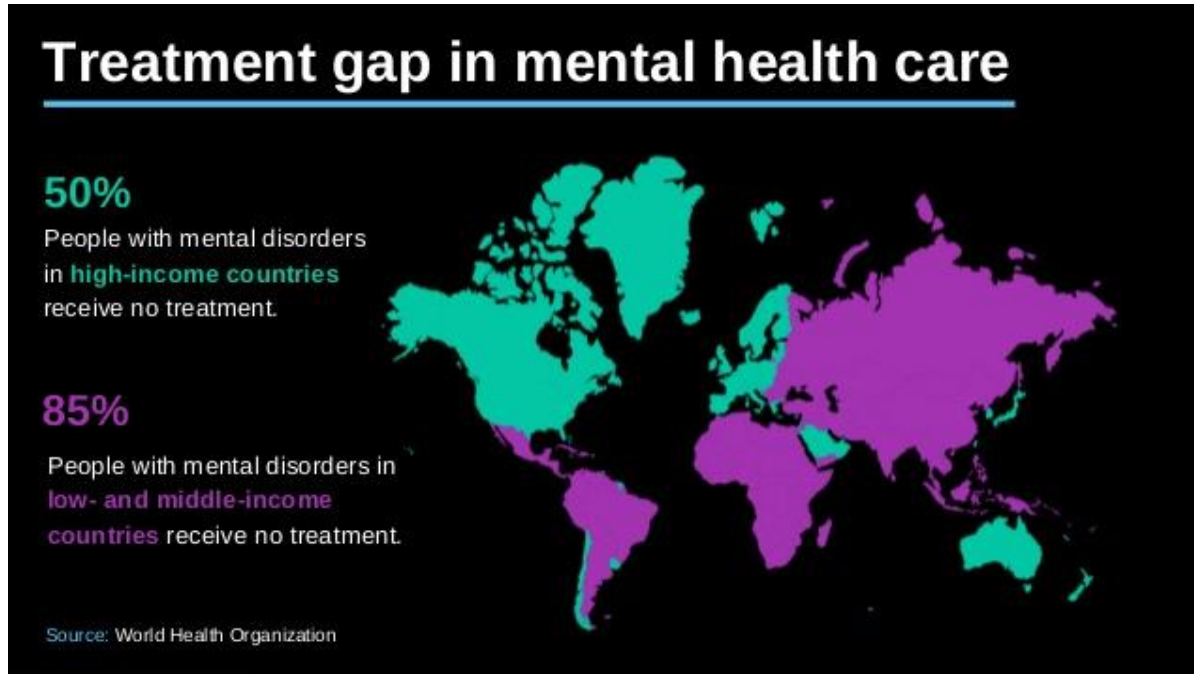
wasil@sas.upenn.edu

@AkashWasil

Overview

- What do we know about technology-based interventions?

- What is COMET, and why did we develop it?

- What results have we obtained so far?

Treatment Gap

- Most people in need of mental health services do not receive them.

Treatment gap in mental health care

50%
People with mental disorders in **high-income countries** receive no treatment.

85%
People with mental disorders in **low- and middle-income countries** receive no treatment.

Source: World Health Organization

Digital interventions

- Digital self-help interventions are effective for common mental health problems

JAMA Psychiatry | Original Investigation | META-ANALYSIS

Efficacy of Self-guided Internet-Based Cognitive Behavioral Therapy in the Treatment of Depressive Symptoms
A Meta-analysis of Individual Participant Data

Karyotaki et al., 2017,
JAMA Psych

Mental Health Apps
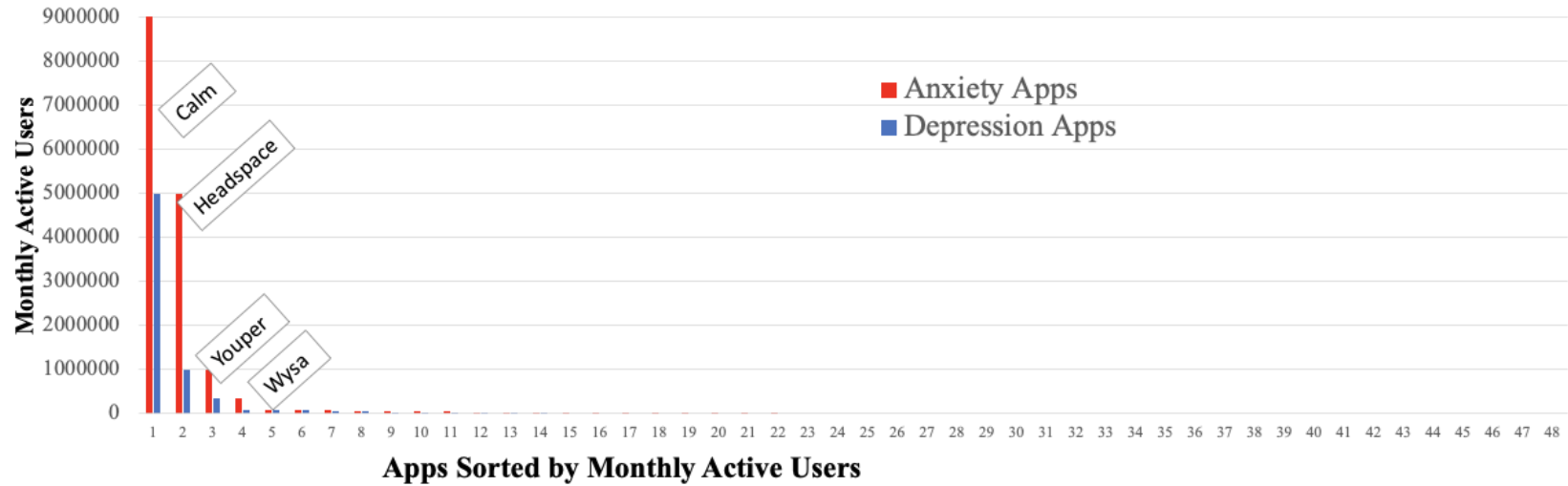
Single-session interventions

- Some interventions have demonstrated effects in a single session

A single-session growth mindset intervention for adolescent anxiety and depression: 9-month outcomes of a randomized trial

Jessica Schleider and John Weisz
Harvard University – Psychology, Cambridge, MA, USA

Schleider & Weisz (2018), *JCPP*

Three Goals when Developing our Interventions

- Evidence-based
  - Common elements approach (Chorpita et al., 2005)
- Not redundant with existing interventions
  - Reviews of the publicly available digital mental health interventions (Wasil et al., 2019; Wasil et al., 2020a)
- Culturally and contextually appropriate
  - Interviews and focus groups with target population (Wasil et al., 2020b)
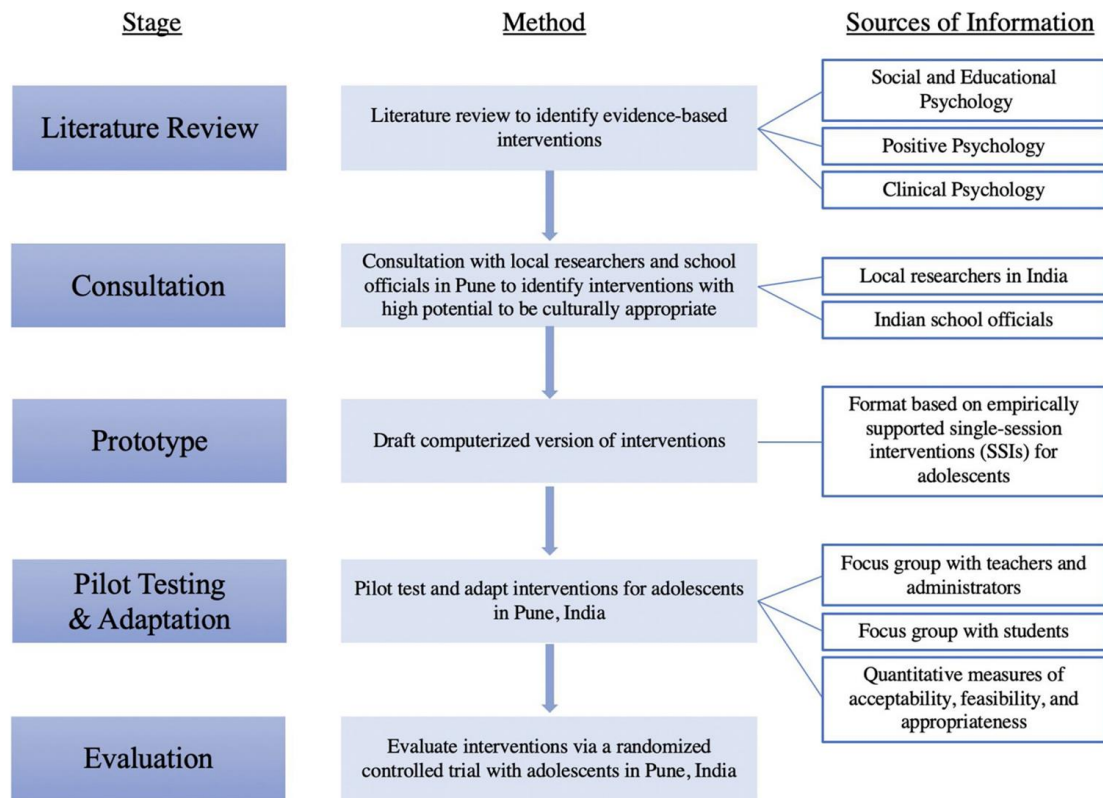
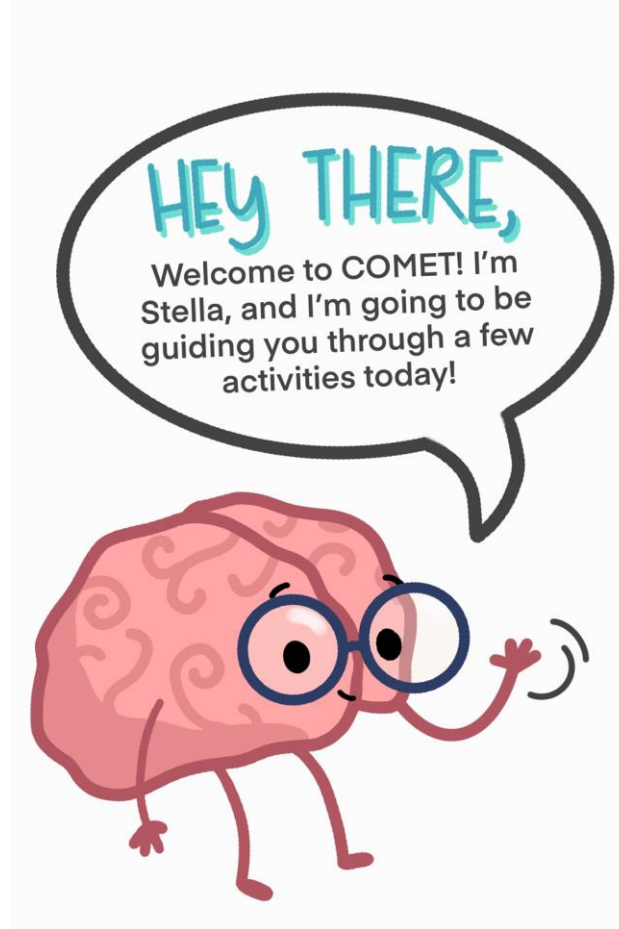# Cultural adaptation for Indian adolescents

Fig. 1. Process of Selecting, Adapting, and Evaluating Single-Session Interventions.

Wasil et al., 2020, *Asian Journal of Psychiatry*
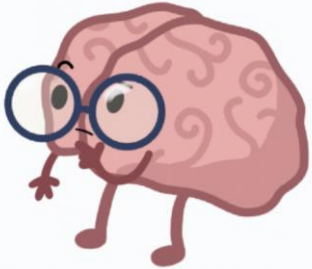
The Common Elements Toolbox (COMET)

Common Elements Toolbox (COMET)

- A digital single-session intervention based on common elements
- 4 modules:
  - Cognitive restructuring
  - Behavioral activation
  - Gratitude
  - Self-compassion
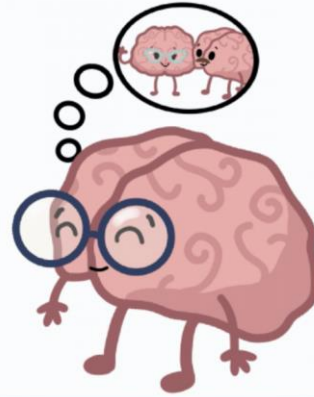
Common Elements Toolbox (COMET)

COMET for Graduate Students

- Study lasted one week
- Late March of 2020
- Recruited 209 participants

- People rated COMET as:
  - Acceptable (93%)
  - Helpful (88%)
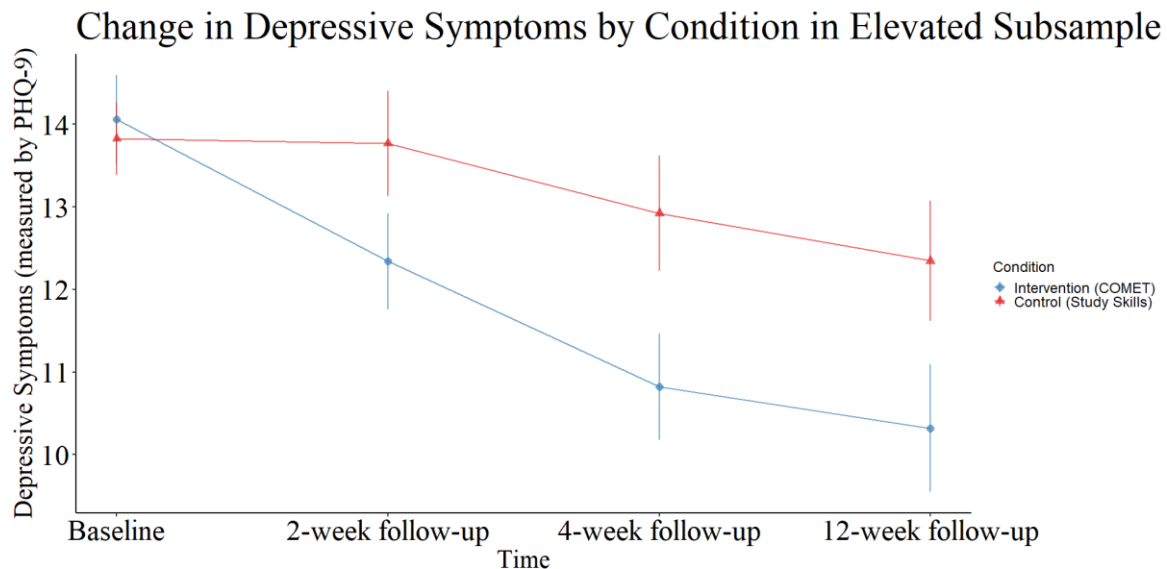 - Engaging (86%)
  - Applicable to their lives (87%)

Table 2
Acceptability and Feedback Ratings on Single-Session Intervention

|	Completers (n = 185) M (SD)	Non-Completers with available data (n = 24) M (SD)
Acceptability Items (range: 1-5)		
Approve	4.18 (0.68)	4.00 (0.82)
Like	4.14 (0.69)	3.88 (0.90)
Welcome	4.23 (0.69)	3.88 (0.90)
Appeals	4.12 (0.70)	4.00 (0.76)
Average Acceptability Score	4.17 (0.65)	3.96 (0.79)
Perceived Utility Items (range: 1-7)		
Helpful	5.73 (1.01)	5.52 (1.19)
Engaging	5.57 (1.07)	5.48 (1.08)
Applicable	5.67 (0.97)	5.48 (1.08)
Average Perceived Utility Score	5.66 (0.93)	5.49 (1.06)

Wasil et al., 2021, *Frontiers in Psych*

COMET for US College Students

- N=291
- Recruited from March 2020 to May 2020

- Significant effects on depression at 12-weeks
  - Full sample (d=0.17)
  - Elevated subsample (d=0.54)

- NS for anxiety and subjective well-being

Change in Depressive Symptoms by Condition in Elevated Subsample

Condition
- Intervention (COMET)
- Control (Study Skills)

Wasil et al., under review

COMET for Indian College Students

- N=514
- Recruited from August 2020 to April 2021

- Significant effects on depression at 4-weeks:
  - Full sample (d=0.35)
  - Elevated subsample (d=0.59)
- Significant effects on anxiety at 4-weeks:
  - Full sample (d=0.20)
  - Elevated subsample (d=0.33)
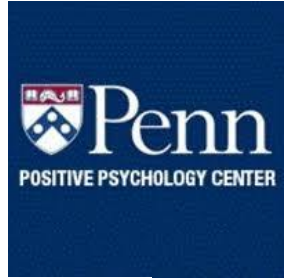- 95% rated COMET as acceptable and appropriate

Changes in Depressive Symptoms

Wasil et al., in prep
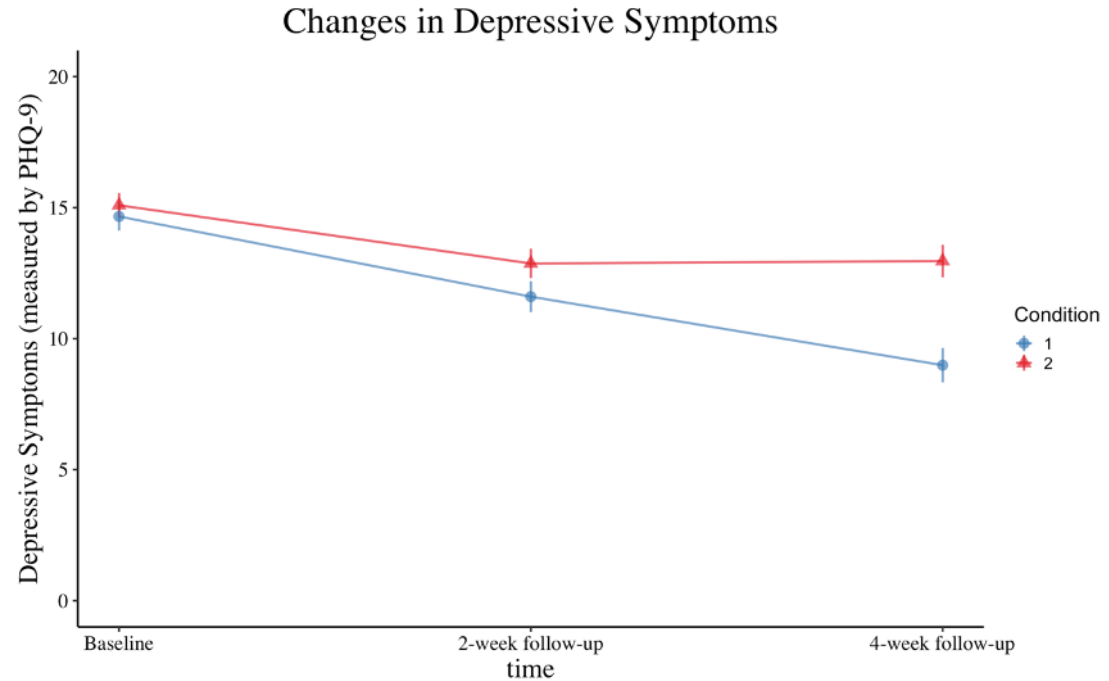
Ongoing work: India, Kenya, and Greece, UK, & US

Acknowledgments

Questions?

About CorStone

We work at the nexus of resilience and social change.

Our evidence-based resilience programs empower youth to re-frame their identities, unleash their potential, and transform their life trajectories.

Founded in 1975, CorStone is a US 501(c)3 nonprofit organization, headquartered in Baltimore, MD USA, with subsidiary offices in India.

"*No one ever told us we had strengths.*"
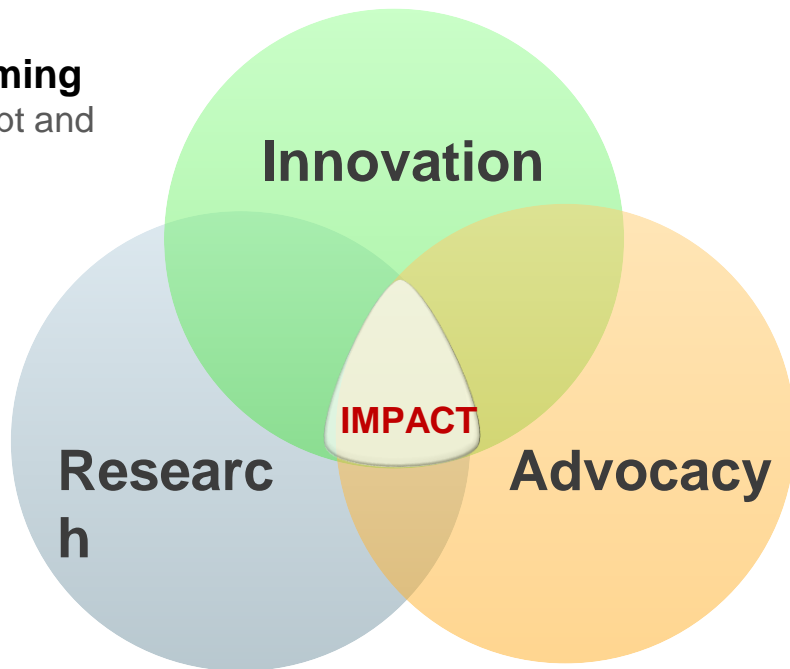Youth First Kenya

Our Approach

Scalable Programming
- Easy to adopt, adapt and implement
- Sustainable
- Cost efficient

Evidence-Based Impact
- Long-term effects
- Feasibility
- Scalability

Innovation

Research

Advocacy

IMPACT

Movement-Building
- Dissemination
- Advocacy
- Partnering with key funders, thought leaders, champions

CORSTONE

Core Programs

Youth First (India, Rwanda, Kenya)

- School-based resilience/adolescent health program for boys and girls

Girls First – KGBV (India)

- Resilience/health program for marginalized girls in government residential girls-only 'KGBV' schools in India

inREACH (India)

- Remote resilience program for marginalized adolescents in LMICs during and after COVID-19

Self-Help Group (SHG) Resilience Project (India)

- Resilience program for low-income women in Self Help Groups, to increase wellbeing, social capital and life skills
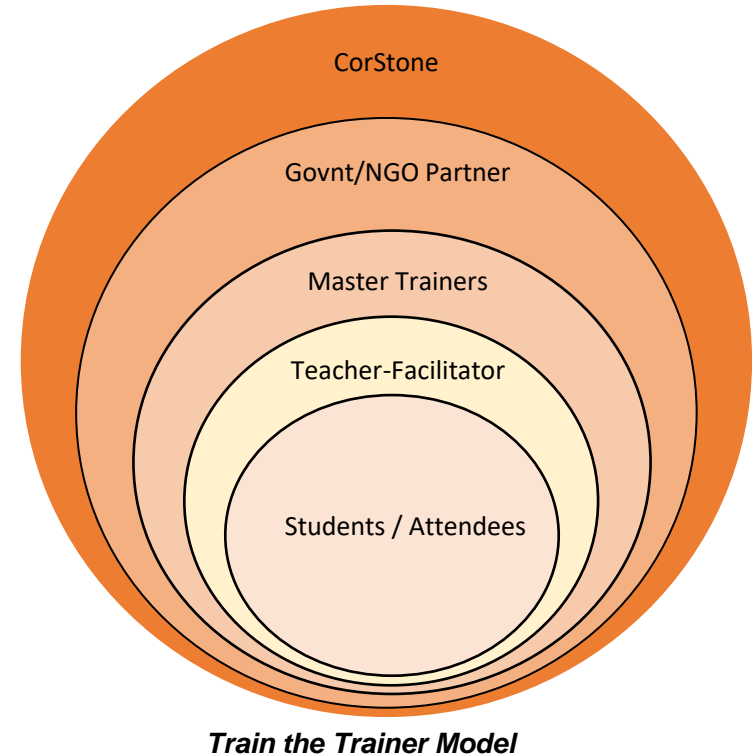
Resilient Parent Program (India)

- Integrated resilience/parenting program for low-income caregivers of children from birth to age 8

School-Based Programs

Student grades	Grades 7 & 8
Total sessions	25-32
Frequency of sessions	Weekly 1 hour
Duration	1-2 years

CorStone
Govnt/NGO Partner
Master Trainers
Teacher-Facilitator
Students / Attendees

Train the Trainer Model

Youth First and Girls First are conducted among middle school students in teacher-facilitated peer support groups of ~15 students per group.

CorStone Model

Self-discovery

+

Skills for intra- and inter-personal growth

⇒

Individual transformation

- Holistic Wellbeing

Social transformation

- Equity
- Liberty
- Diversity
- Peace

- What are my strengths?
- What do I feel?
- What do I want?

- Emotion management
- Goal setting and planning
- Problem solving
- Assertive communication
- Conflict resolution

← Facilitated Peer Support / Social connection →

Example: Youth First Rwanda
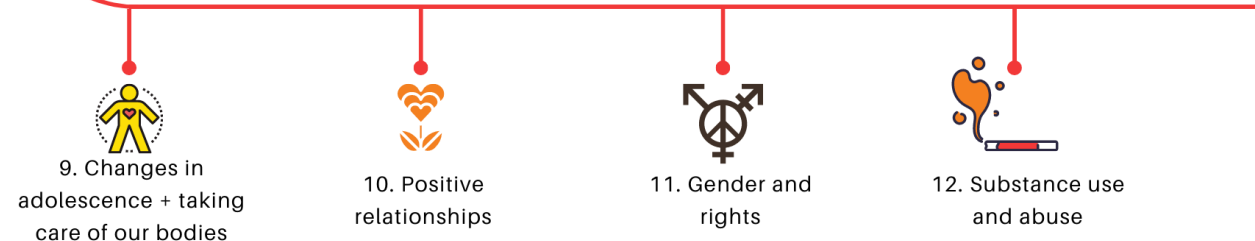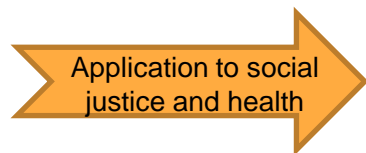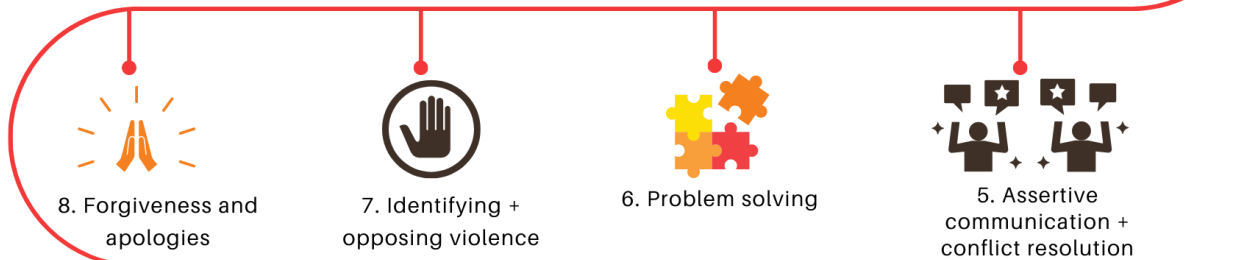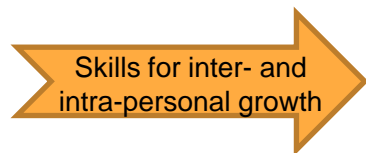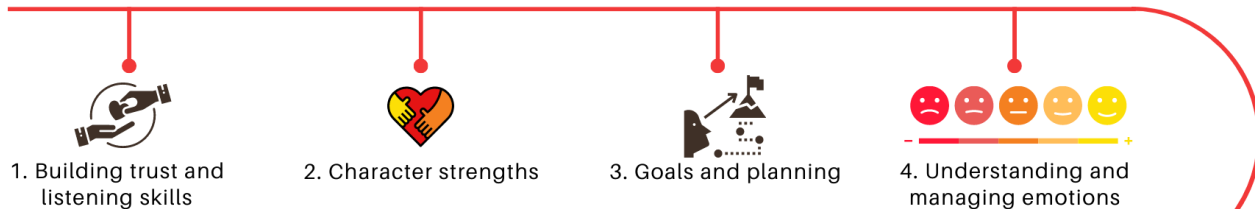
Girls First - Bihar: Randomized controlled trial (RCT)

- 3,400 adolescent girls in 76 schools
- 70 community women trained as program facilitators
- Profile: 12-16 years old in rural poverty in Bihar, India

3 intervention arms and 1 control arm:
- Resilience Curriculum only (RC)
- Health Curriculum only (HC)
- Resilience + Health (RC + HC)
- School-as-usual control (SC; no intervention)

- 15-20 girls per group
- Meet 1-2 times per week for 1 hour
- 6-8 month program
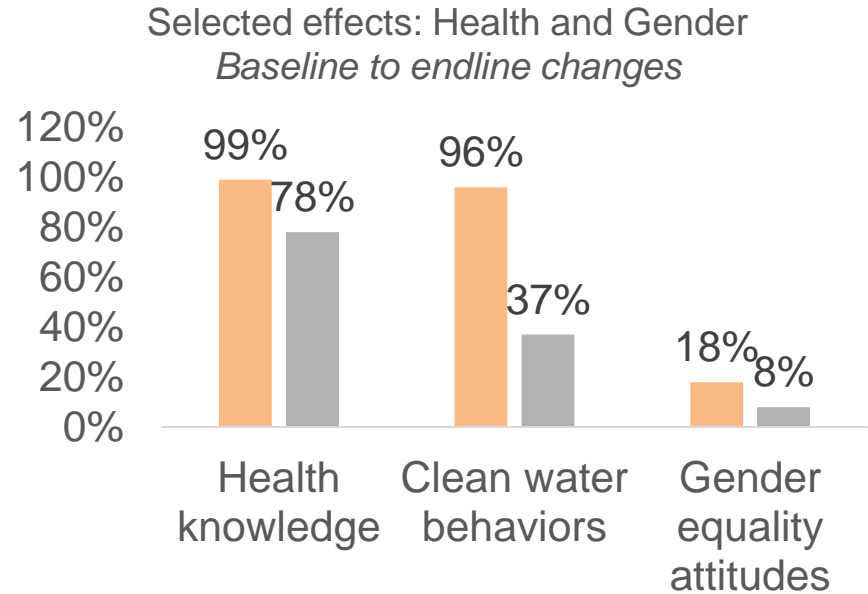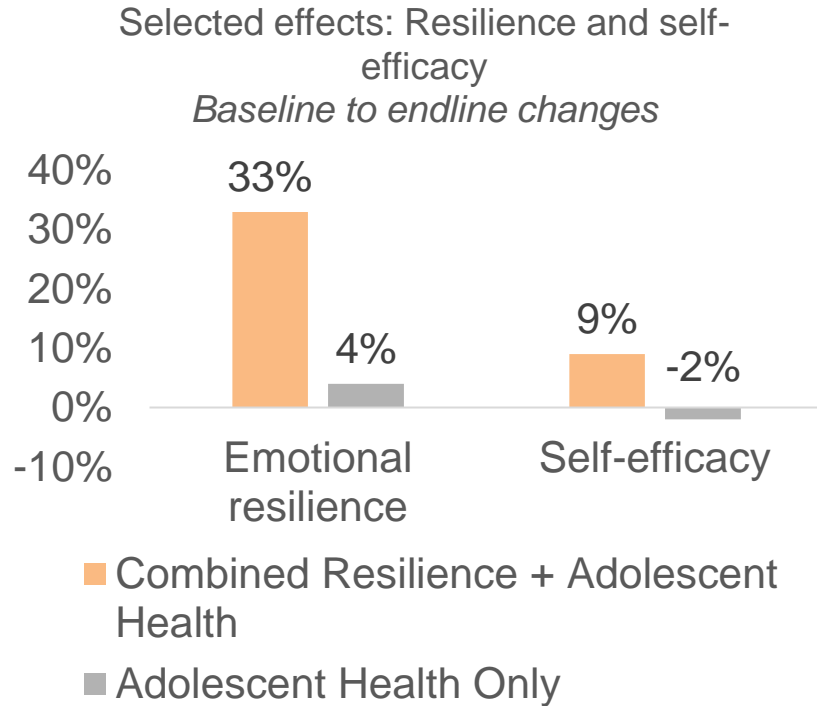- 2 Program Facilitators per group

Assessment Framework

Quantitative

Impact area	Key Outcomes	Assessment tools (Examples)
Mental/ emotional wellbeing	• Resilience • Self-efficacy • Psychological wellbeing	• Connor-Davidson Resilience Scale-10 • General Self-Efficacy Scale • KIDSCREEN Psychological Wellbeing subscale • Patient Health Questionnaire-9; GAD-7

Physical wellbeing	• Health knowledge
	• Health-related behaviors
	• Health/gender attitudes
		• Survey instrument developed in part from:
		  • General self-report of health
		  • Indian Adolescent Health Questionnaire
		  • KIDSCREEN Physical Wellbeing subscale

Social wellbeing	• Social skills • Social relationships (peers; family)	• Relevant Child and Youth Resilience Measure subscales • KIDSCREEN Social Wellbeing subscale
Academic wellbeing	• School engagement • Perceived safety at school	• School records; survey instrument • Child and Youth Resilience Measure Education Subscale

Qualitative

• Semi-structured individual interviews and focus group discussions (FGDs)
• Interview and FGD guides mirrored quantitative assessments; targeted in-depth descriptions of experiences and views

Girls First RCT Results

Selected effects: Resilience and self-efficacy
Baseline to endline changes

Emotional resilience: 33%, 4%
Self-efficacy: 9%, -2%

■ Combined Resilience + Adolescent Health
■ Adolescent Health Only

Selected effects: Health and Gender
Baseline to endline changes

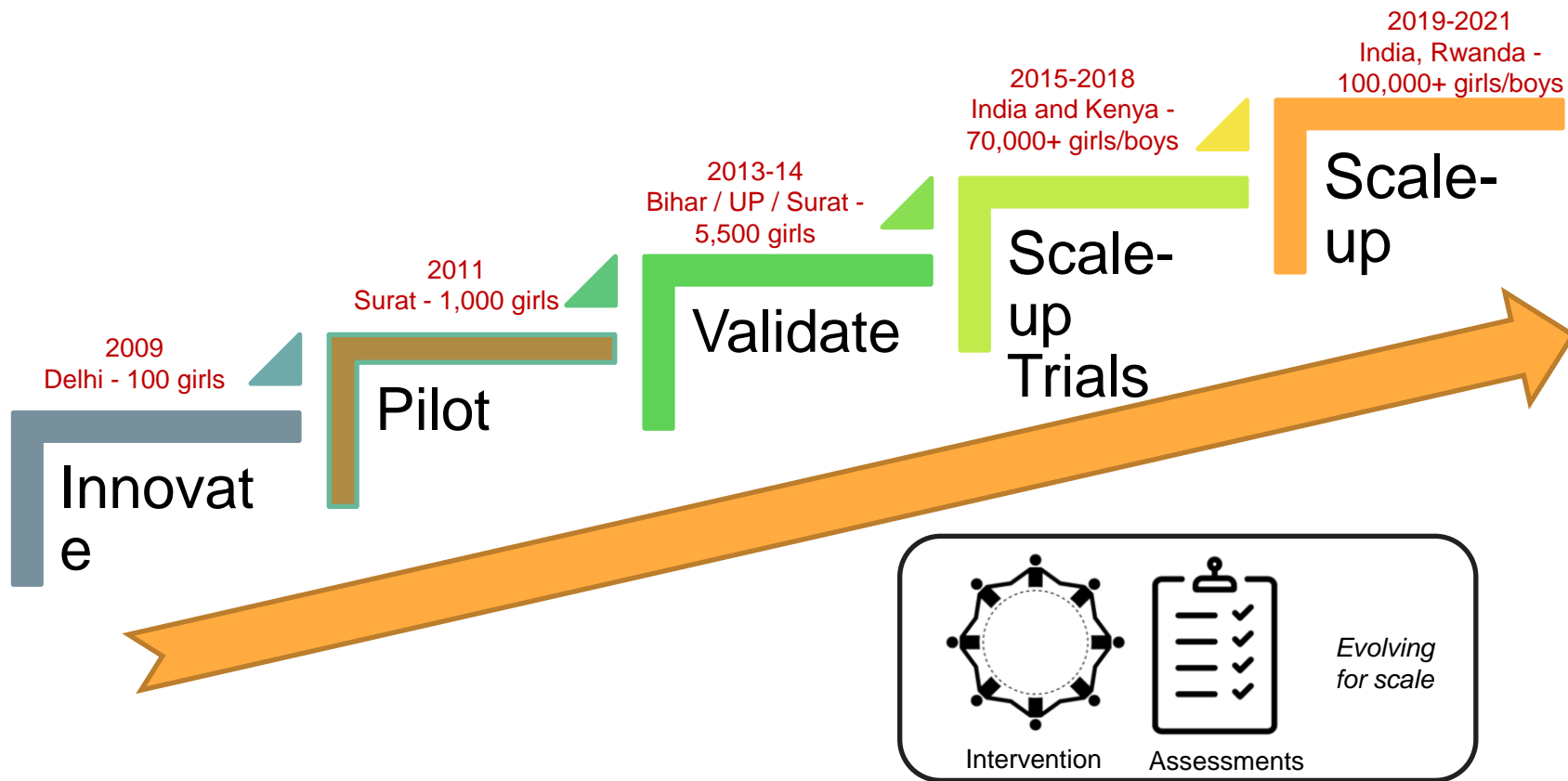Health knowledge: 99%, 78%
Clean water behaviors: 96%, 37%
Gender equality attitudes: 18%, 8%

See [Leventhal et al. 2015](#) and [Leventhal et al. 2016](#) for full results.

Statistically significant effects consistently found between Combined Condition and Adolescent Health Only Condition. Resilience *amplifies* the effects of a health curriculum.

CorStone Journey

2009
Delhi - 100 girls

Innovate

2011
Surat - 1,000 girls

Pilot

2013-14
Bihar / UP / Surat -
5,500 girls

Validate

2015-2018
India and Kenya -
70,000+ girls/boys

Scale-up Trials

2019-2021
India, Rwanda -
100,000+ girls/boys

Scale-up

Evolving for scale

Intervention   Assessments

Thank you!

For more information:

Kate Leventhal
Chief Program Officer
katel@corstone.org
www.corstone.org

Why does emotional intelligence matter in SA countries?
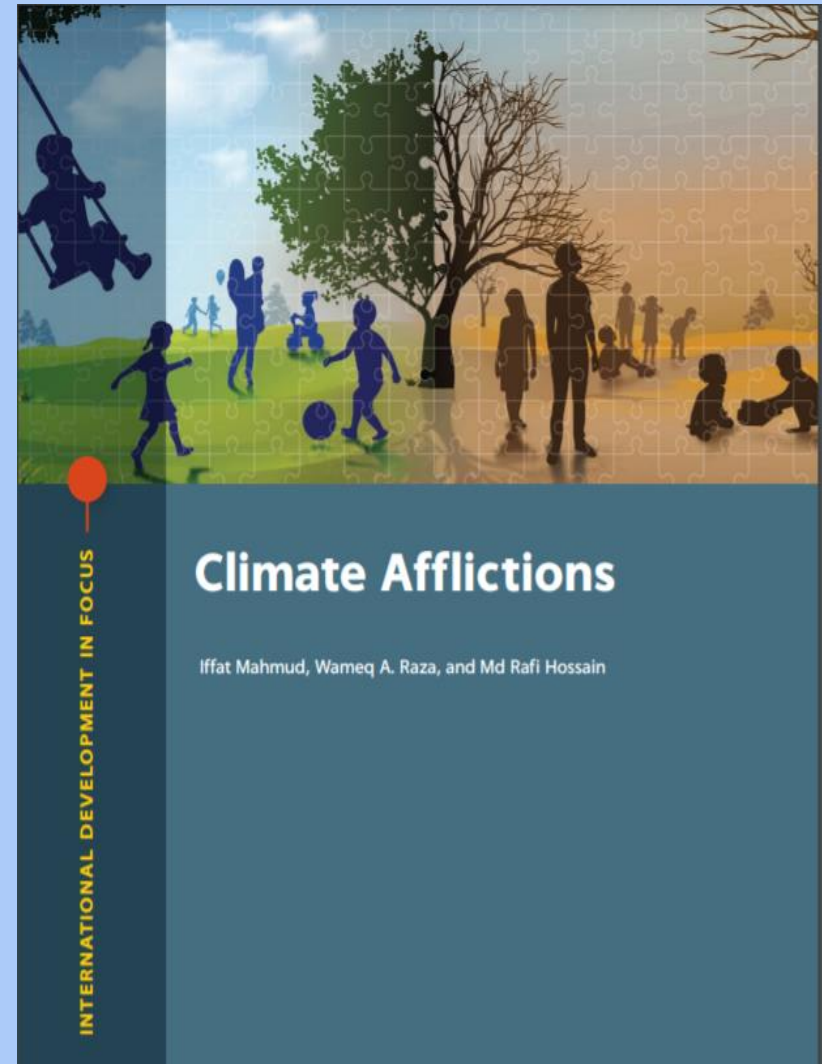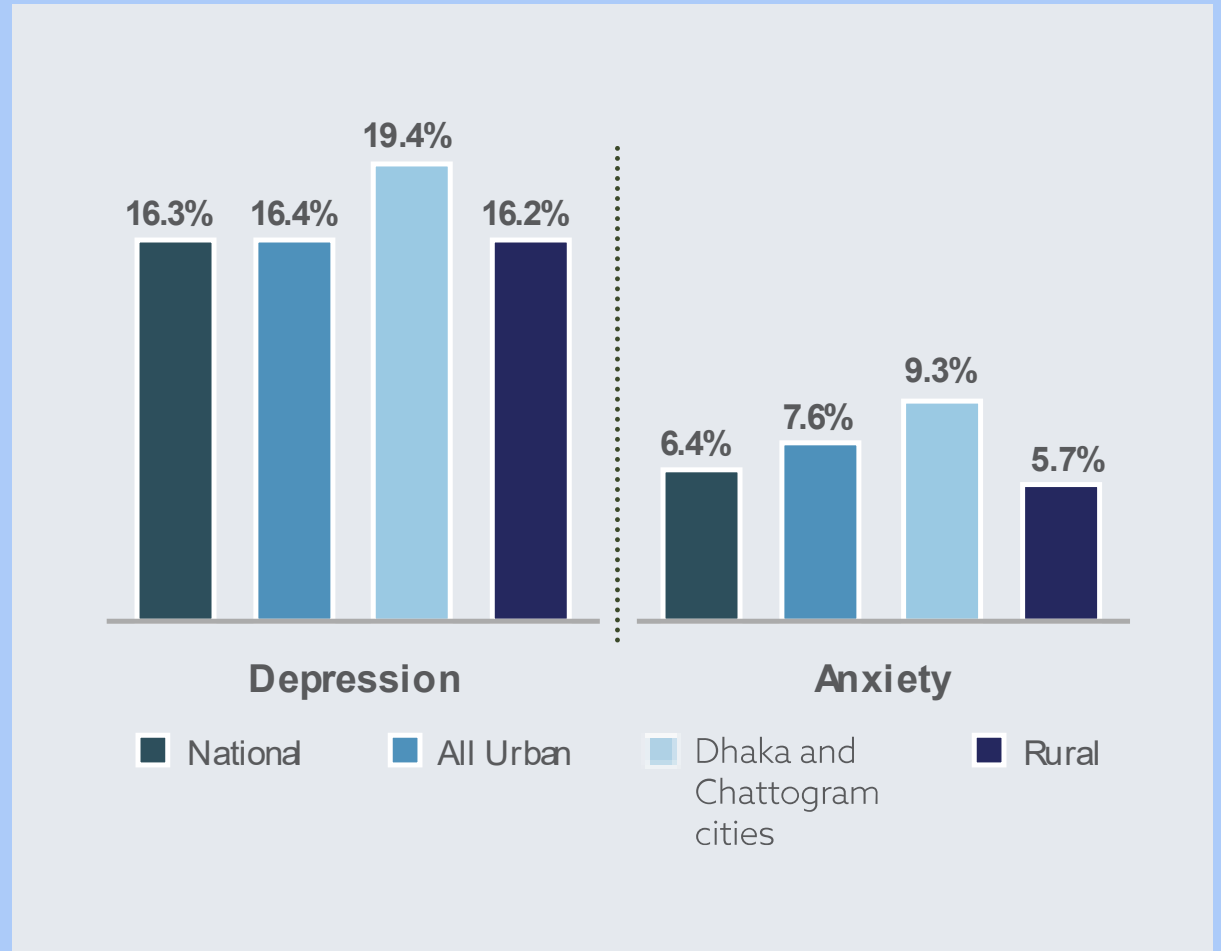
Mental health in Bangladesh

Who is more vulnerable?

More people depressed and anxious in Dhaka and Chattogram compared to the national average

Women of ages 26-40 and the elderly (65+ years) are more susceptible to depression
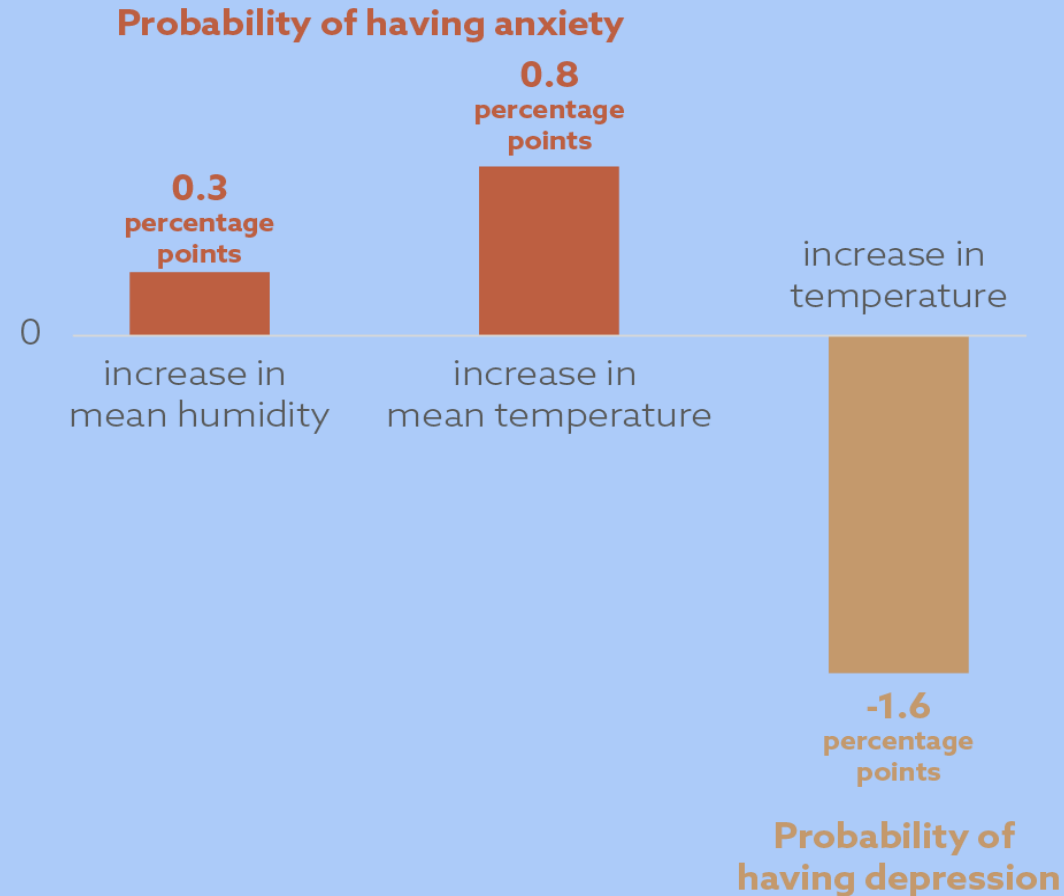

Mahmud, Iffat; Raza, Wameq A.; Hossain, Md Rafi (2021)

The weather causes mood swings

Climate variables have a slightly different impact on anxiety than depression

- Increase in mean humidity and mean temperature increases the probability of having anxiety by 0.3 percentage points and 0.8 percentage points, respectively

- Increase in temperature lowers the probability of depression by 1.6 percentage points

Probability of having anxiety

0.8 percentage points

0.3 percentage points

0

increase in mean humidity

increase in mean temperature

increase in temperature

-1.6 percentage points

Probability of having depression

Mahmud, Iffat; Raza, Wameq A.; Hossain, Md Rafi (2021)

4

And yet stigmatization remains strong

Nepal

- 30% of adults and adolescents agree that seeking mental health treatment is a personal failure
- 55% of adults and 49% of adolescents agree that seeking mental health treatment is a sign of a weak will

What works?

- Explaining to **parents** that mental health issues are common, treatable, and that seeking treatment is not a sign of weakness increases their stated willingness to seek counselling by 0.11 SD
- Describing to them the true story of a celebrity's struggles with mental health increases stated willingness by 0.10 SD
- But information treatments did not have similar effects on stated willingness of **adolescents** to seek counselling

Baral, et al. (Forthcoming, do not cite)

From research to action *(and financing)*

Lifecycle approach

Maldives Enhancing Employability and Resilient of Youth Project: Short course on Personal Initiative Training (entrepreneurship) which includes emotional resilience development, with the objective of building the confidence of aspiring youth to benefit from the Business Pitch Competition Grant

Bangladesh Accelerating and Strengthening Skills for Economic Transformation: Formal and enterprise-based training for youth that includes soft and life skills development, targeting in particular women, PWD, and ethnic minorities