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

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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.

Treatmet 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

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

Apps Sorted by Monthly Active Users

- Anxiety Apps
- Depression Apps

Wasil et al., 2020, AJP
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

<table>
<thead>
<tr>
<th>Stage</th>
<th>Method</th>
<th>Sources of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Review</td>
<td>Literature review to identify evidence-based interventions</td>
<td>Social and Educational Psychology, Positive Psychology, Clinical Psychology</td>
</tr>
<tr>
<td>Consultation</td>
<td>Consultation with local researchers and school officials in Pune to identify interventions with high potential to be culturally appropriate</td>
<td>Local researchers in India, Indian school officials</td>
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<tr>
<td>Prototype</td>
<td>Draft computerized version of interventions</td>
<td>Format based on empirically supported single-session interventions (SSIs) for adolescents</td>
</tr>
<tr>
<td>Pilot Testing &amp; Adaptation</td>
<td>Pilot test and adapt interventions for adolescents in Pune, India</td>
<td>Focus group with teachers and administrators, Focus group with students</td>
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<tr>
<td>Evaluation</td>
<td>Evaluate interventions via a randomized controlled trial with adolescents in Pune, India</td>
<td>Quantitative measures of acceptability, feasibility, and appropriateness</td>
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</tbody>
</table>

Fig. 1. Process of Selecting, Adapting, and Evaluating Single-Session Interventions.
The Common Elements Toolbox (COMET)

Hey there,
Welcome to COMET! I'm Stella, and I'm going to be guiding you through a few activities today!
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**

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

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
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?
School-based Resilience Programs for Youth in LMICs

S4YE Webinar
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

Advocacy

Movement-Building
- Dissemination
- Advocacy
- Partnering with key funders, thought leaders, champions
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
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
- What are my strengths?
- What do I feel?
- What do I want?

Skills for intra- and inter-personal growth
- Emotion management
- Goal setting and planning
- Problem solving
- Assertive communication
- Conflict resolution

Individual transformation
- Holistic Wellbeing

Social transformation
- Equity
- Liberty
- Diversity
- Peace

Facilitated Peer Support / Social connection
Example: Youth First Rwanda

Self-discovery
1. Building trust and listening skills
2. Character strengths
3. Goals and planning
4. Understanding and managing emotions

Skills for inter- and intra-personal growth
5. Assertive communication + conflict resolution
6. Problem solving
7. Identifying + opposing violence
8. Forgiveness and apologies

Application to social justice and health
9. Changes in adolescence + taking care of our bodies
10. Positive relationships
11. Gender and rights
12. Substance use and abuse
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

<table>
<thead>
<tr>
<th>Impact area</th>
<th>Key Outcomes</th>
<th>Assessment tools (Examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental/emotional wellbeing</td>
<td>• Resilience • Self-efficacy • Psychological wellbeing</td>
<td>• Connor-Davidson Resilience Scale-10 • General Self-Efficacy Scale • KIDSCREEN Psychological Wellbeing subscale • Patient Health Questionnaire-9; GAD-7</td>
</tr>
<tr>
<td>Physical wellbeing</td>
<td>• Health knowledge • Health-related behaviors • Health/gender attitudes</td>
<td>• Survey instrument developed in part from: • General self-report of health • Indian Adolescent Health Questionnaire • KIDSCREEN Physical Wellbeing subscale</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>• Social skills • Social relationships (peers; family)</td>
<td>• Relevant Child and Youth Resilience Measure subscales • KIDSCREEN Social Wellbeing subscale</td>
</tr>
<tr>
<td>Academic wellbeing</td>
<td>• School engagement • Perceived safety at school</td>
<td>• School records; survey instrument • Child and Youth Resilience Measure Education Subscale</td>
</tr>
</tbody>
</table>

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

See Leventhal et al. 2015 and Leventhal et al. 2016 for full results.
CorStone Journey

Innovate - Pilot - Validate - Scale-up

- 2009 Delhi - 100 girls
- 2011 Surat - 1,000 girls
- 2013-14 Bihar / UP / Surat - 5,500 girls
- 2015-2018 India and Kenya - 70,000+ girls/boys
- 2015-2018 India and Kenya - 70,000+ girls/boys
- 2019-2021 India, Rwanda - 100,000+ girls/boys
Thank you!

For more information:
Kate Leventhal
Chief Program Officer
katel@corstone.org
www.corstone.org
Enhancing Emotional Intelligence

*Perspectives from South Asia*
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.

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