STRENGTHENING THE EVIDENCE BASE

A HEALTH IMPACT EVALUATION of ‘ADVANCING ADOLESCENTS’

Program Implementing Partners

MERCY CORPS

Research Consortium

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Positive Pathways, Jordan, November 2017
Program goals: To alleviate profound stress, build resilience, create support, heal conflict.

Study goals: To achieve a robust evaluation of impacts on health.

Advancing Adolescents (Nubader)
**Advancing Adolescents**

**Programming goals and delivery**

**Scalable** in featuring structured activities, delivered by trained local volunteers, for 8 weeks, to groups of boys and girls (11-18 year old); implemented in Jordan, Lebanon, Iraq, Syria, Turkey for youth affected by the Syria crisis.

**Strategic** in focusing on adolescence, a key time for protecting the next generation and building its future.

**Innovative** in serving both refugee & host communities.
What are the key program elements - The active ingredients of change?

+ Profound Stress Attunement (PSA) approach based on the International Child Development Program ICDP manual (Macphail et al. 2017)

Program principles are made explicit

Profound stress impacts the heart, the body & the brain: it affects emotions, social relationships, behaviors, learning & decision-making
This impact evaluation is built on multiple partnerships

+ Humanitarian actor: Mercy Corps implemented the intervention on a regional scale

+ Community-based organizations: Prioritized adolescents

+ Syrian refugee & Jordanian host communities

+ In-country research partner: Dr. Rana Dajani (Hashemite U) anchored the evaluation

+ Interdisciplinary research consortium: Researchers at US, UK & Canadian universities provided interdisciplinary expertise

+ Funders (R2HC)

http://www.elrha.org/map-location/yale-psychosocial-call2/
Question 1. What are the impacts on wellbeing? Does the program work, for whom, and for how long?

Innovations
Independent evaluation team
Randomized trial (n=817)

Survey at three time points
T1 before program (baseline)
T2 after program (10-weeks)
T3 at follow-up (11 months)
A robust, ethical study engages the community

We conducted a **fair** Randomized Trial to compare ‘intervention’ and ‘control’ groups over time: youth drew lollipops…
Survey tools must be relevant to context

We measure several dimensions of wellbeing: the spectrum from fear to hope

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Specific measures</th>
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<tbody>
<tr>
<td>Insecurity</td>
<td><strong>Human Insecurity Scale (HI):</strong> 10 item scale assessing fears regarding daily life necessities, personal and family safety, and the future.</td>
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<tr>
<td>Stress</td>
<td><strong>Human Distress (HD):</strong> 12 item scale assessing frustration</td>
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<tr>
<td>Anxiety/depression</td>
<td><strong>Arab Youth Mental Health (AYMH):</strong> 21 item scale assessing mental health difficulties</td>
</tr>
<tr>
<td>Resilience</td>
<td><strong>Child and Youth Resilience Measure (CYRM):</strong> 12 item scale measuring support at individual, family, and community level</td>
</tr>
</tbody>
</table>
We found beneficial impacts

By program modalities
Impacts are stronger for Vocational & Technical skills-building sessions

By outcomes and population groups

<table>
<thead>
<tr>
<th></th>
<th>Low trauma (0-3 events) - Jordanian</th>
<th>High trauma (4+ events) – Syrian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Insecurity (HI)</td>
<td>Medium effects (d=0.4)</td>
<td>Medium effects (d=0.5)</td>
</tr>
<tr>
<td>Stress (HD)</td>
<td>Small effects (d=0.2)</td>
<td>Medium effects (d=0.4)</td>
</tr>
<tr>
<td>Anxiety/depression (AYMH)</td>
<td>Medium effects (d=0.4)</td>
<td>Medium effects (d=0.5)</td>
</tr>
<tr>
<td>Resilience (CYRM)</td>
<td>Moderating effects</td>
<td>No effects</td>
</tr>
</tbody>
</table>

Impacts can be small d=02, medium d=04, or large d=08
Interpreting small to medium effects

For human insecurity, we show medium effects \((d=0.4)\): after the intervention, 66% of the treatment group would have lower insecurity scores than the average person in the control group.

This is a substantial benefit: pre-intervention, *half our sample* \((55\%, n=817)\) experienced insecurity “always” or “most of the time.”

In human biology, a medium effect size \((d=0.5)\) is 'large enough to be visible to the naked eye’ (e.g. differences between the heights of 13 year-old and 16 year-old girls in the US).

In the field of education, a small effect size \((d=0.2)\) raising academic achievement represents a very significant improvement, particularly if improvements apply to all students, and if effects are sustained over time.
Interpreting medium effects

Post-intervention, 2 months later

Half the sample experience high insecurity; intervention & control groups are the same

Pre-intervention

66% of the intervention group have reduced insecurity, relative to the average control
We also found sustained benefits over time

For human Insecurity (fear): impacts are observed 11 months later

Not so for other outcomes

This intervention can accelerate recovery

Panter-Brick et al (2017)
Question 2. What are the impacts on the body?

**Innovation:** we measured the physiological signature of the Profound Stress Attunement approach

Hair cortisol is a ‘stress diary’

**Community engagement is vital:**
We hired local hairdressers (male & female) to cut ~100 strands of hair and give youth a professional hair-cut
Cortisol and risks to health

Over time, high cortisol levels associate with depression, memory & learning deficits, overweight, high blood glucose & blood pressure. Low levels lead to poor immune function.

We found lower cortisol levels, post-intervention

We found three stress trajectories

An effective intervention will normalise cortisol production

Results under embargo for now. Please see last slides for ‘Resources.’
Summary of findings

The 8-week intervention had beneficial impacts on both self-reported wellbeing & stress physiology (subjective & objective reports)

Specifically, it reduced insecurity and normalized cortisol production over time, for boys and girls, Syrian refugees and Jordanian hosts.

Implications:

Adolescents affected by the Syria crisis can benefit from ongoing psychosocial support programming to reduce insecurity and profound, chronic stress.

Improving social environments helps to protect adolescent health and development (in body, heart and mind).
What difference will this study make?

For humanitarian programming: we demonstrated the effectiveness of a model for reducing stress and improving mental health

Toolkit: we developed Arabic-language survey tools and tested proof-of-concept with stress biomarkers – better tools means that we have more confidence in measured outcomes.

Approach: Strong partnerships are key, including funders & communities.
Recommendations

**Implementation research:** We can compare the ‘active ingredients’ of program content & delivery across contexts, to learn why & how programs work.

**Policy:** We can leverage key program components to design effective interventions.

**Strategic evaluation:** We choose programs that are effective, feasible, cost-effective, scalable, sustainable, equitable & culturally-compelling (7 dimensions of ‘success’).
Intervention impacts on wellbeing:


Resilience measure:


Cortisol profiles and intervention impacts:


Conflict, Resilience & Health Program at Yale: https://crh.macmillan.yale.edu/