Evaluating a mind-body intervention with human trafficking survivors in Uganda

Catherine Carlson, Sophie Namy, Agnes Grace Nabachwa, Sylvia Namakula, Yan Luo, Madeleine Ollerhead, Laura Cordisco Tsai, Lauren Ng

SVRI Forum 2022
Healing and Resilience after Trauma

**Story:** Started in 2016 in Uganda to expand access to collective care practices, yoga and meditation for all women and girls who have experienced violence.

**Mission:** To cultivate a safe and supportive spaces where participants can experience healing as they connect & build trust with each other.

**Core Program:** Move with HaRT
Team HaRT

Joyce Christine Nakiwala
Sylvia Namakulwa
Sophie Namy
Catherine Carlson
Agnes Grace Nabachwa
Why a mind-body intervention for survivors of violence?
The power of mind-body practices

Psychological Benefits

Neuro-biological Benefits

Social Benefits

(BRIDGES & SHARMA, 2017; VAN DER KOLT ET AL., 2014; DEMANICOR, 2016)
But still much to learn!

- Mental health challenges the most common and long-lasting impacts of violence
- Still learning how to do culturally relevant & effective mental health work in low-resource settings
- Limited research on mind-body practices with survivors of violence
- Need for research and practices to support survivors of Human Trafficking who are exposed to multiple forms of violence
Move with HaRT
Program Overview

- Group-based
- Trauma-informed and survivor-centered
- 12 weekly sessions
- Three core themes / 12 sub-themes
- Integration of breath, movement, healing concepts & group interaction
- Evolving content

Move with HaRT

Month 1 Safe in the Body
1. Living in the moment Here and now, each breath is unique
2. Wisdom of the body Exploring my own rhythms
3. Permission to rest Surrender to what I need & deserve
4. Standing in my power Holding steady through calm & storms

Month 2 Radical Self Love
5. Letting go of self-doubt Cultivating inner-kindness
6. Softening the heart I am perfect, just as I am
7. Bravely facing anger I hold space for all my emotions
8. Savouring sweetness Experiencing joy & feeling good

Month 3 Compassion in Action
9. Connecting to each other The experiences that bind us
10. Forgiveness for freedom Nurturing inner-peace
11. Just like me Tuning into our shared humanity
12. Steady roots, open heart Finding strength in vulnerability
Move with HaRT Session Overview

1. Theme
2. Introduction
3. Centering Exercises
4. Warm Up
5. Dynamic movement
6. Winding down
7. Relaxation (with mindfulness practices)
8. Closing Circle
Move with HaRT
Uganda Evaluation
Study Aims

1. Determine *feasibility and acceptability* of Move with HaRT in Ugandan shelters for survivors of human trafficking

2. Explore *preliminary effectiveness* of Move with HaRT on mental health and wellbeing
Design and Setting

- Quasi-experimental: Panel design with non-randomized comparison group
- Embedded mixed-methods data collection
- Setting: Shelters for survivors of human trafficking based in Kampala, Uganda
Study Participants

- Study participants n=21
- Women and girls aged 14-29 yo
- Survivors of trafficking for labor and sexual exploitation
- History of multiple forms of violence
- Majority (~80% lived in shelters for over 6 months)
- Elevated rates of PTSD (77%), depression (65%), and anxiety (33%)
Data Collection

Quantitative
- Six waves of survey: 3 Baseline, Midline, Endline, 1-month FU
- First two waves in-person; last four via telephone (COVID-19 lockdown)
- Validated measures for Depression (PhQ9), Anxiety (GAD), and PTSD (PCL)

Qualitative
- In-depth interviews with all participants pre- and post-intervention (via phone)
- Interview protocol focused on perceived changes in psychological, physical, and social wellbeing; suggested changes to intervention; likelihood of recommending to a friend; etc.
- Process data collection (facilitator feedback forms and notes from Closing Circles)
Data Analysis

Quantitative
• Bivariate analysis comparing baseline differences between two groups
• Graphic analysis
• Segmented regression analyze intervention group averages for before (waves 1-3) and after (waves 4-6) intervention
• Fixed-effect models were used to compare changes in intervention and comparison groups immediately before (wave 3) and at last follow-up (wave 6) the intervention

Qualitative
• Thematic analysis with verbatim transcripts

Mixing
• Matrix analysis of individual perceived changes and symptom score changes
### Multivariate Results

#### Parameter estimates from segmented regression

<table>
<thead>
<tr>
<th></th>
<th>PTSD</th>
<th>Anxiety</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est.</td>
<td>s.e.</td>
<td>p</td>
</tr>
<tr>
<td>Intercept $\beta_0$</td>
<td>32.0</td>
<td>4.56</td>
<td>&lt;.00</td>
</tr>
<tr>
<td>Baseline trend $\beta_1$</td>
<td>0.49</td>
<td>1.68</td>
<td>0.77</td>
</tr>
<tr>
<td>Level change after intervention $\beta_2$</td>
<td>-14.0</td>
<td>5.60</td>
<td>0.02</td>
</tr>
<tr>
<td>Trend change after intervention $\beta_3$</td>
<td>-2.20</td>
<td>2.90</td>
<td>0.45</td>
</tr>
<tr>
<td>Post-intervention trend $\beta_1 + \beta_3$</td>
<td>-1.71</td>
<td>2.05</td>
<td>0.41</td>
</tr>
</tbody>
</table>

#### Fixed Effects - Comparing the Intervention against the comparison groups

<table>
<thead>
<tr>
<th></th>
<th>PTSD</th>
<th>Anxiety</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>33.00</td>
<td>12.11</td>
<td>-20.89</td>
</tr>
<tr>
<td>Comparison</td>
<td>35.9</td>
<td>46.2</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>Diff.$^2$</td>
<td>-31.19</td>
<td></td>
</tr>
<tr>
<td>$p^3$</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Graphic Results

[Graph showing depression scores during Covid Lockdown and Move with HaRT]

Covid Lockdown
Move with HaRT
Qualitative Changes

- Physical changes
  - More mobility & flexibility
  - More ‘lightness’
  - Reduced physical pains
  - Improved sleep
- Emotional changes
  - Happiness & joy
  - Less stress/ anxiety/ anger
  - More love/ acceptance towards self
  - Increased agency/ power/ confidence
  - More mindfulness
  - More hopefulness
- Social changes
  - New/ improved relationships
  - Increased ability to trust & share
  - More compassion/ forgiveness
[From HaRT] I have learned that having a good relationship with other people starts with loving myself. I cannot love other people if I do not love myself.

To me I think yoga is a therapy, it takes your body through an adventure and discovery . . . and in the long run you find that it may lead to healing of heart, body, and soul.

Today’s [HaRT] session made me feel happy. I realized we were doing a poem. We were expressing our feelings without talking. . . The way we moved our bodies showed that we are in control of our bodies.
Limitations

- Other shelter programming (although most of the participants had already been at the shelter for a long period of time)
- Segmented regression included data from midline
- Assessment effects and non-blinded interviewers
- Sample size
- Non–equivalent comparison group
- Social desirability
What does this mean?

Shows promise:
- Addresses current gap in psycho-social care for this community
- Positive findings around feasibility, resonance and potential for healing

Low cost & sustainable:
- Participants can integrate practices & carry forward

Need for more research and learning:
- Effectiveness trial
- Implementation learning
Thank you!