



# PEACE. LOVE. YOUTH. (in) YOGA: Development of a Mental Health Promotion Program Among Youth Living in the Inner City

I am showing three images of adolescents participating in yoga

Sherilyn Ganer, PhD, MPH | University of Alabama at Birmingham

- Studies show that 12–17 % (7.5–14 million) of adolescents in the United States have an emotional or behavioral disorder that impairs their functioning, yet only 20–50% of these adolescents receive services

(Costello et al., 2003; Merikangas et al., 2010)

- Black adolescents disproportionately reside in resource-poor, urban environments that can negatively impact their mental health needs and use as well as access to mental health services

(Cooley-Quille et al. 2001; Kodjo & Auinger, 2004)

Question: Is the development and implementation of a yoga and meditation program among Black adolescents living in a public housing community in Birmingham, Alabama effective, feasible and sustainable?

Statement of the problem

# Project Overview

- Social-Ecological Model (SEM) guided this study
  - A. Individual – interpersonal – organizational – community- public policy
  - B. States that behaviors both shape and are shaped by the social environment
  - C. Allowed the researcher to evaluate a pilot mental health promotion program and explore the effects of significant and dynamic interrelationships that exist among the layers
- Community Based Participatory Research: partnership that equitably involves community members, organizational representatives, and researchers in all aspects of the research process,
  - A. Brings together partners with different skills, knowledge, and expertise to address complex problems
  - B. Extends the likelihood of overcoming the distrust of researchers
  - C. Aims to improve health and well-being of the involved communities

# Research Aims

- Aim 1: To assess the preliminary efficacy of community-based yoga and meditation program on Black adolescents' levels of depression, anxiety, and perceived stress.
- Aim 2a: To explore adolescents' thoughts about meditation and yoga, feasibility of practicing meditation and yoga at home, and acceptability of practicing meditation and yoga around family and friends.
- Aim 2b: To assess the feasibility, acceptability, and practicality of implementing the mental health promotion from the staff's perspective.

# Variables

## Controlled variables

- Class structure
- Yoga instructor
- Focus group facilitator
- Staff who participated in program

## Independent variable

- Attendance
- Analyzing participants' attendance to see if there are any effects

## Dependent variable

- Adolescents' depression, anxiety, and perceived stress
- Use the Revised Children's Anxiety and Depression Scale and Perceived Stress Scale

Adolescents who complete more meditation and yoga classes will have decreased symptoms of depression, anxiety, and perceived stress compared to those who attend fewer classes.

Hypothesis

# Procedure

## Step 1

Adolescents participated in the PEACE yoga/meditation program:

- Wave 1  
6-week program  
(n=36)
- Wave 2  
5-week program  
(n=8)

## Step 2

Three focus groups were conducted:

- Wave 1 (n=16)  
8 males and 8 females
- Wave 2 (n=5)  
Females only

## Step 3

Open-ended questionnaires were administered:

- Staff (n=3)  
Shared their perspectives about the feasibility, sustainability, and effectiveness of program

# One Way ANOVA Results

Comparison	Number Analyzed by Group	F (df)	P	Levene's Test p
PSSC – complete data only for whole study	3 or greater n= 21	.317 = (1, 32)	.577	.143
	Less than 3 n = 13			
PSSC for BOCF data for whole study	3 or greater n= 22	.138 = (1,34)	.713	.111
	Less than 3 n = 14			
RCAD GAD for complete data (wave 1 only)	3 or greater n= 10	.766 = (1,10)	.742	.381
	Less than 3 n = 2			
RCAD GAD for BOCF data (wave 1 only)	3 or greater n= 20	.613 = (1,31)	.440	.048
	Less than 3 n = 13			
RCAD MDD for complete data (wave 1 only)	3 or greater n= 9	.115 = (1,9)	.402	.862
	Less than 3 n = 2			
RCAD MDD for BOCF data (wave 1 only)	3 or greater n= 20	.178 = (1,31)	.676	.187
	Less than 3 n = 13			

# Journaling Themes

- Relaxation and Peace
- Happiness
- Enjoyment

- “I felt peaceful after the yoga lesson.” – Candace
- “It made me happy to see the things I can do and things I can feel when I am relaxed. It’s like I felt no fears or worries when I breathed in and out. It made me feel like no anger inside me.” – Dixie
- “It [yoga] make me feel good.”- Bobby
- “Today yoga was the best because I had a rough day today so that was relaxing.” - Gabby

# Focus Group Themes

- Relaxation and Peace

- Coping Strategies

- 2a. Changed Mood

- 2b. Positive Thinking

- 2c. Empowerment

- Exercise

- “Yoga is it keeps me, it keeps like calm, like mediating, like sitting in the quiet room by myself, and it keeps me thinking how I’m going to do better.” – Evan
- “Because when I’m in a bad mood, I can meditate then I’ll go to a good mood.” – Dorothy
- “Yoga at home help me calm down. If I was mad, I do yoga at home.” - Carl
- “Like if I’m mad, I could do yoga so I won’t ummm get angry.” – David “It [yoga] make me feel good.”- Bobby

# Staff Quotes from Questionnaires

- Barriers to implement

- Benefits of the program

- Sustainability

- “Unfortunately, many of our youth don’t depend on family support to attend program, they usually take the initiative.” – Carolyn
- “Some of our more behaviorally challenged children love to participate in yoga and are able to concentrate fully which is usually a challenge for them.” –April
- “ I heard reports of at least one young boy who incorporated some calming strategies before overreacting at school.” – Beatrice
- “I think the more consistency we have the more the kids will grow and look forward to it.” – Carolyn

# Conclusion

- No significant results from the RCAD (GAD and MDD) and PSSC assessments to show that adolescents who attended more classes experienced/expressed less depression, anxiety, and perceived stress
- Journal entries, focus groups, open-ended staff questionnaires, and field notes provide insights into what the adolescents were feeling about the program and how much of an impact it was having in their lives
  1. This was corroborated by the staff in their responses about the strengths of the program
- Future directions:
  - Study parent-adolescent relationships
  - Train community leaders and adolescent champions
  - Pay careful attention to the impact of the time demands and offerings of the program

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