

Intervention IP-130: Strong African American Families (SAAF) program

The Strong African American Families (SAAF) program is a family-centered, randomized intervention designed to prevent risk behaviors in African American youth by enhancing parental warmth, involvement, and communication. Delivered across seven weekly 2-hour sessions at community facilities in rural Georgia, SAAF significantly reduced metabolic syndrome components at age 25 among youth with high unsupportive parenting at baseline ($\beta = -.17$, $p = .03$). The program also reduced inflammation and catecholamine levels in prior follow-ups. Funded by NICHD and NIDA.

Overview

Purpose of Intervention:

The purpose of the Strong African American Families (SAAF) program is to prevent risk behaviors in African American youth by enhancing parental warmth, involvement, and communication, with the long-term goal of improving health outcomes.

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Academic/Clinical Researchers Only

Citations:

- Brody GH, Kogan SM, Chen YF, McBride Murry V. Long-term effects of the strong African American families program on youths' conduct problems. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*. 2008 Nov;43(5):474-81. Epub 2008 Jul 31.
Relevance: Main Intervention, Post-Intervention Outcomes
- Chen E, Miller GE, Yu T, Brody GH. Unsupportive parenting moderates the effects of family psychosocial intervention on metabolic syndrome in African American youth. *International journal of obesity* (2005). 2018 Apr;42(4):634-640. Epub 2017 Oct 6.
Relevance: Post-Intervention Outcomes

- Miller GE, Brody GH, Yu T, Chen E. A family-oriented psychosocial intervention reduces inflammation in low-SES African American youth. *Proceedings of the National Academy of Sciences of the United States of America*. 2014 Aug 5;111(31):11287-92. Epub 2014 Jul 21.
Relevance: Post-Intervention Outcomes
- Brody GH, Yu T, Chen E, Miller GE. Prevention moderates associations between family risks and youth catecholamine levels. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*. 2014 Nov;33(11):1435-9. Epub 2014 Mar 3.
Relevance: Post-Intervention Outcomes
- Brody GH, Chen YF, Kogan SM, Murry VM, Brown AC. Long-term effects of the strong African American families program on youths' alcohol use. *Journal of consulting and clinical psychology*. 2010 Apr;78(2):281-5.
Relevance: Post-Intervention Outcomes

Adaptation of Another Research-based Intervention:

No

Contact Information

Primary Contact Affiliation:

University of Georgia

Intervention URL:

<https://cfr.uga.edu/>

Results

Intentions

1. **Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)**

Intervention Primary Outcome:

Number of clinically elevated metabolic syndrome components at age 25, including central adiposity, high blood pressure, high triglycerides, high fasting glucose, and low HDL cholesterol.

Intervention Secondary Outcome:

Metabolic syndrome diagnosis (binary), defined as presence of central adiposity plus at least two additional components per International Diabetes Federation guidelines, assessed at age 25.

Key Findings:

Among African American youth from low-income rural Georgia, participation in the SAAF family intervention significantly reduced clinically elevated metabolic syndrome components at age 25 for those with high unsupportive parenting at baseline ($\beta = -.17$, $p = .03$; effect size = $-.350$, $SE = 0.178$). The intervention group had 0.35 fewer elevated metabolic syndrome components than controls among high-risk youth. For metabolic syndrome diagnosis, the interaction was marginally significant ($OR = .807$,

$p=.083$). Mediation analyses showed that intervention effects were partially explained by improvements in parenting targets (parental involvement, family rules, warmth), with an indirect effect of -0.051 (95% CI: $-0.150, -0.003$). Effects remained significant after controlling for depression, life stress, and unhealthy behaviors.

Statistical Method Used:

Linear and logistic regression models tested interactions between unsupportive parenting and intervention status predicting metabolic syndrome counts and diagnosis. A latent difference score mediation model with nonparametric bootstrapping (1,000 iterations) tested indirect effects via parenting improvements. Johnson-Neyman regions of significance testing identified where groups differed. All models controlled for gender, SES, depression, life stress, and unhealthy behaviors.

2. Reduce health disparities (study must show that health disparities are being measured between a population with health disparities and a reference group)

Intervention Primary Outcome:

Reduction in clinically elevated metabolic syndrome components at age 25 among African American youth from low-income rural backgrounds, a population with documented higher rates of metabolic syndrome compared to national averages.

Intervention Secondary Outcome:

Metabolic syndrome diagnosis at age 25, defined by International Diabetes Federation criteria, in a population of low-income, rural African American youth disproportionately affected by cardiometabolic disease.

Key Findings:

The SAAF family intervention reduced metabolic syndrome risk in low-income rural African American youth, a group with disproportionately high cardiometabolic burden. Among those with high unsupportive parenting at baseline, the intervention significantly reduced clinically elevated metabolic syndrome components at age 25 versus controls ($\beta=-.17$, $p=.03$; effect size= $-.350$, $SE=0.178$). The 17.1% metabolic syndrome diagnosis rate observed is comparable to national estimates, suggesting the intervention may help close the disparity gap in this high-risk population. Mediation analyses indicated that improvements in parenting practices (involvement, warmth, family rules) partially accounted for reduced metabolic syndrome risk (indirect effect= -0.051 , 95% CI: $-0.150, -0.003$). Results held after controlling for depression, life stress, and unhealthy behaviors.

Statistical Method Used:

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Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

No

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Hypertension, Obesity, Type 2 Diabetes

Race/Ethnicity:

African American or Black

Populations with Health Disparities:

Racial and Ethnic Minority Populations, Underserved Rural Communities

Age:

Adolescents (10 - 17 years), Young Adults (18 - 39 years)

Socio-demographics / Population Characteristics

Community Type:

Rural

Other Populations with Health Disparities:

Unspecified

Geographic Location:

Georgia

Socio-Economic Status:

Unspecified

Research Framework

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
Determinant Types	Biological	✓			
	Behavioral	✓	✓		
	Physical / Built Environment				
	Sociocultural Environment	✓	✓		✓
	Health Care System				

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

No Role

Dissemination:

No Role

Evaluation:

No Role

Implementation:

Participation

Outreach:

Participation

Planning :

No Role

Recruitment:

Participation

Sustainability:

No Role

Characteristics and Implementation

Intervention Focus Area:

Behavior Change, Quality Improvement or Organizational Change

Disease Continuum:

Primary Prevention, Secondary Prevention

Delivery Setting:

Home, Local Community (e.g. Barbershops, Beauty / Hair Salon, Laundromats, Food Markets, Community Centers)

Mode of Delivery:

In-person

Who delivered the Intervention?:

Community Health Worker/Promoters, Health Educator

Conceptual Framework**Intervention Theory:**

Social Cognitive / Social Learning Theory, Social Norms Theory

Intervention Framework:

Community Organization / Community Building, Social Ecological Model

Implementation**Intervention Study Design:**

Individual Randomized Controlled Trial/Comparative (requires random assignment, a control/comparison group, and pre and post intervention outcome assessments)

Targeted Intervention Sample Size:

391

Actual Intervention Sample Size:

391

Start Year:

2001

End Year:

2015

Intervention Exposures**Duration of Intervention/How Long it Lasted:**

More than 5 years

Frequency of Intervention Delivery:

Weekly

Number of Sessions/Meetings/Visits/Interactions:

7-8 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

1-2 Hours

Format of Delivery:

Group (e.g. Community leaders), Individual

Highest Reading Level of Intervention Materials Provided to Participants:

Unspecified

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

Yes

The SAAF intervention previously documented reductions in pro-inflammatory cytokines (age 19) and catecholamine levels (age 20) in those with high unsupportive parenting. The program also demonstrated long-term prevention of alcohol/drug use initiation, reduction of conduct problems, and enhancement of protective parenting practices and youth self-regulatory capabilities.

Essential Aspects for Success:

Targeting developmentally appropriate, protective parenting practices; imparting self-regulatory skills during preadolescence; using trained community facilitators from the same cultural background as participants.

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

Not available

Insights Gained During Implementation

No insights available.

Intervention Components

Intervention Has Multiple Components:

Yes

Assessed Each Unique Contribution:

No

Products, Materials, and Funding

To request SAAF program materials contact the Center for Family Research at the University of Georgia (cfruga@uga.edu).

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Research/Data science	Yes	Yes
Community mobilization, community organization/coalition building	Yes	Yes
Health Education / Health Literacy	Yes	Yes
Clinical Care	Yes	Unknown
Partnerships		
Universities	Yes	Yes
Community groups (e.g. faith-based organizations, barbershops, beauty-salons, laundromats, food markets, community centers, cultural associations, tribal groups)	Yes	Yes
Government agencies (city/state/county health department, law enforcement/criminal justice agencies)	Yes	Unknown
Funding Sources		
Public funding (e.g., federal, state or local government)	Yes	Unknown

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Publicity Materials (e.g. Posters, Flyers, Press Releases)	No		https://cfr.uga.edu/
Informed Consent Form	No		https://cfr.uga.edu/
Participant Educational Tools			
Brochures/Factsheets/Pamphlets	No		https://cfr.uga.edu/
Parent and youth skill-building curricula and family curriculum	No		To request SAAF program materials contact the Center for Family Research at the University of Georgia (cfruga@uga.edu).
Measurement Tools			
Standardized Instrument/Measures	No		To request SAAF program materials contact the Center for Family Research at the University of Georgia (cfruga@uga.edu).

Implementation Materials and Products

	Material
Implementation/Delivery Materials	
Coordinator or Facilitator's Guides, Curricula	To request SAAF program materials contact the Center for Family Research at the University of Georgia (cfruga@uga.edu).
Implementation/Output Materials	
Best Practice Guidelines	To request SAAF program materials contact the Center for Family Research at the University of Georgia (cfruga@uga.edu).

Articles Related to Submitted Intervention

	Article
Reports/Monographs	
Methodology, Evaluation	https://doi.org/10.1111/j.1467-8624.2004.00713.x
Methodology, Evaluation	https://doi.org/10.1037/0022-006X.74.2.356
Additional Articles	
Evaluation	https://doi.org/10.1073/pnas.1406578111
Evaluation	https://doi.org/10.1037/hea0000072