



Neighborhood Characteristics and Physical Activity Promotion in African Americans



Research Team

Funded by the
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Lifestyle Health Behaviors

- Regular physical activity, weight control and healthier food choices could
 - Reduce cancer cases by 30% to 40%
 - Reduce diabetes cases by 15%
 - Reduce heart disease cases by 23%
- These diseases are estimated to cause 75% of all deaths, 66% of all medical expenditures, and contribute to health disparities.

Physical Activity Mediating/Modifying Factors

Determinant

Demographics

- Gender, education, income
- Race/ethnicity

Psycho-Social-Cognitive

- Self-efficacy, enjoyment, stage of change, benefits, social support
- Barriers, mood, intensity
- Knowledge, beliefs, seriousness of illness

Physical Environment

- Opportunities to engage in PA
- Neighborhood characteristics
- Community partnerships

Evidence

- Positive, moderate
- Negative, moderate

- Positive, moderate
- Negative, moderate
- Lack of association

- Positive, moderate



Research Aim

- Participants who receive the NuFIT intervention will have a greater and more positive change in physical activity behavior, dietary fruits and vegetables intake, and health outcomes as compared to participants who do not receive the NuFIT intervention.



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Predisposing Factors

- Health history
- Gender, age, race/ ethnicity, income, literacy, education
- Sedentary
- Overweight
- Other risk factors
- Health screening
- Health disparity experiences

NuFIT for Life Randomized Controlled Community Trial

Mediators (Covariates)

- Social support
- Enjoyment
- Stage of readiness

Afrocentric Intervention

- Health education
- Individual tailoring
- Group activity

Community Partners

- Community centers
- Churches
- Libraries
- Gyms
- And growing...

SOCIOCULTURAL CONTEXT

Outcomes



- Physical activity
- Healthy eating
- Self-efficacy
- Knowledge
- Quality of life
- Depression
- Body mass index
- Cholesterol, HbA1c, BP, HR

NuFIT Intervention

Nguzo Saba

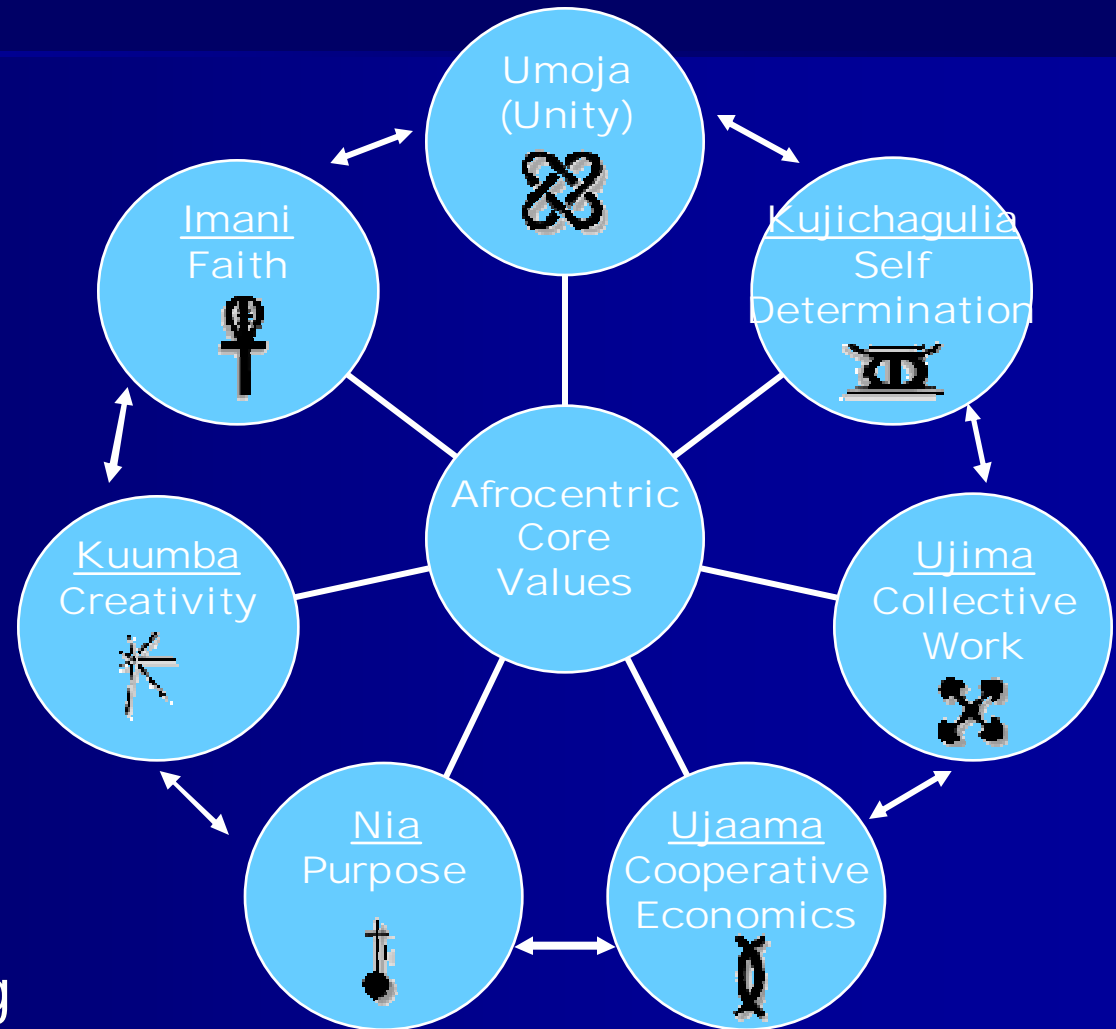
Physical Activity

Weeks 1-12

- Group
- Tailored Health Education

Weeks 1-8

- Healthful choices
- Cancer prevention
- Physical activity
- Healthy weight
- Nutrition/cooking
- Emotional well-being



Sample ($N = 164$)

Intervention (n = 95)

- 46.8 years
- 80.0% female
- 28% married
- 91.5% H.S. & higher
- 49.0% <\$35,000

Type of work

- 8.7% unemployed
- 35.9% clerical/sales
- 28.3% professionals
- 27.2% technical

Control (n = 69)

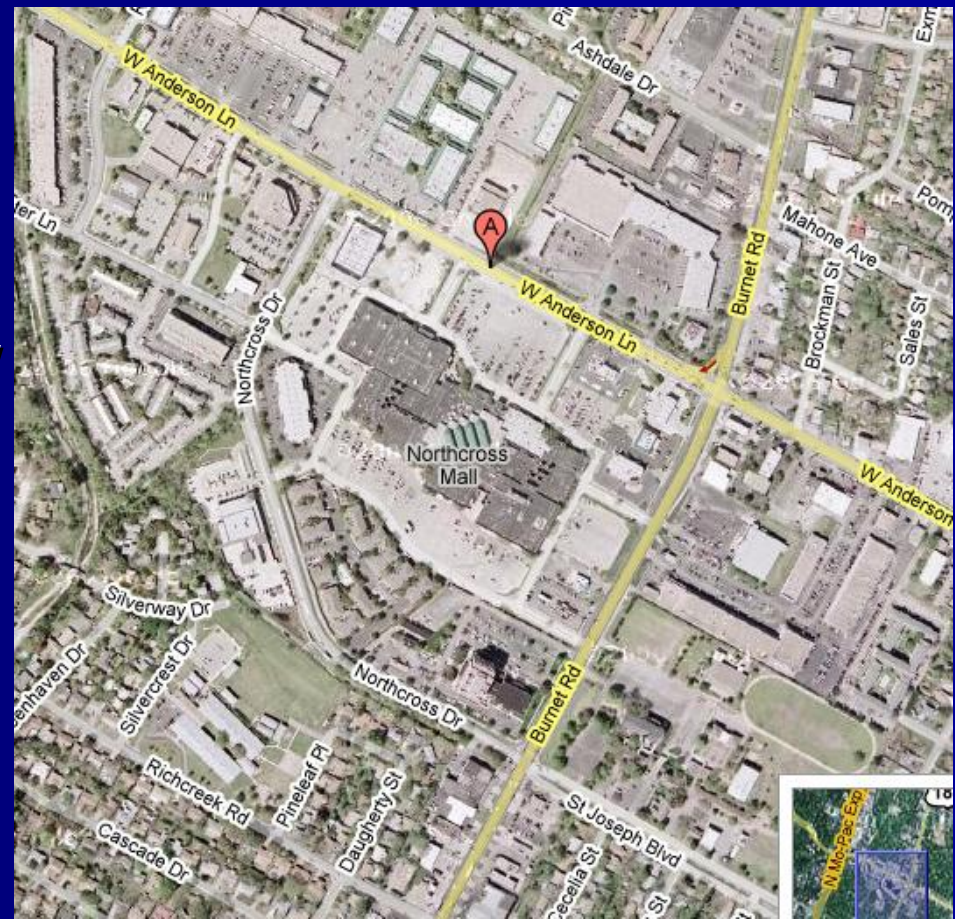
- 43.1 years
- 78.3% female
- 24% married
- 92.8% H.S & higher
- 53.0% <\$35,000

Type of work

- 9.1% unemployed
- 24.2% clerical/sales
- 28.8% professionals
- 37.9% technical

Setting ($N = 164$)

- Alameda County
 - Oakland, CA
 - 70.1% ($n = 115$)
- San Francisco County
 - San Francisco, CA
 - 16.5% ($n = 27$)
- San Mateo County
 - East Palo Alto, CA
 - 13.4% ($n = 22$)



Main Type of Housing in the Neighborhood ($N = 164$)

- Detached, single housing: 78 (49.7%)
- Mix of single-family residences: 47 (29.9%)
- Town/row houses, apartments, condos: 21 (13.4%)
- Apartments/condos of 4-12 stories: 9 (5.7%)
- Apartments/condos of 12+ stories: 2 (1.3%)

Neighborhood Environment Friendly for Physical Activity ($N = 164$)

	<i>M</i>	<i>SD</i>
PHYSICAL ACTIVITY FRIENDLY	3.00+	
Sidewalks on most streets in neighborhood	3.64	0.91
Transit stop within 10-15 minutes from home	3.25	1.14
Sidewalks are well maintained	3.08	0.98
4-way intersections in my neighborhood	3.00	1.06
1=Strongly disagree; 2=Somewhat disagree; 3=Somewhat agree; 4=Strongly agree		

Neighborhood Environment Not Friendly for Physical Activity ($N = 164$)

	<i>M</i>	<i>SD</i>
PHYSICAL ACTIVITY IMPROVEMENT NEEDED	Below 3.00	
Free or low-cost recreation facilities	2.92	1.08
Stores within walking distance from home	2.85	1.18
Crime rate makes unsafe to walk at night	2.76	1.12
I see people being physically active	2.66	1.09
Bicycle paths in neighborhood	2.65	1.25
Interesting things to look at while walking	2.56	1.01
1=Strongly disagree; 2=Somewhat disagree; 3=Somewhat agree; 4=Strongly agree		

Enhancing Neighborhood Opportunities for Physical Activity

- We identify, plan, and advocate for environmental supports for physical activity in the community.
- We increase the number and types of places to engage in physical activity by providing no-cost community-based physical activity opportunities that are safe and accessible in the community.
- We provide individual, group and community levels of social support for maintaining physical activity behavior.

Measuring the Effects of Neighborhood Opportunities

- International Physical Activity Questionnaire
- FITT: frequency, intensity, type, and time

Types of Physical Activity

- Job-related
- Transportation
- Housework and caring for family
- Recreation, sport, and leisure-time
- Sitting

Physical Activity: **Leisure Time** (Intervention Group)

Baseline Mean (SD)			
	<u>Walking</u>	<u>Vigorous</u>	<u>Moderate</u>
Days/week	1.14 (1.73)	0.27 (0.84)	0.15 (0.71)
Minutes/day	32.33 (73.44)	3.15 (10.61)	3.63 (10.13)
3 Months Mean (SD)			
Days/week	2.58 (2.39)	0.89 (1.68)	0.83 (1.79)
Minutes/day	74.91 (105.66)	41.85 (69.28)	30.63 (55.93)
<i>Paired-t</i> (Days)	-4.46, <i>df</i> =71, <i>p</i> =.0005	NS: <i>p</i> =.002	NS: <i>p</i> =.002
<i>Paired-t</i> (Mins)	NS: <i>p</i> =.02	-3.70, <i>df</i> =45, <i>p</i> =.001	NS: <i>p</i> =.004

Summary

- In general, a majority of the sample view their neighborhoods as being physical-activity unfriendly with improvements needed in the physical environment as well as neighborhood opportunities to participate in physical activity.
- After participating in NuFIT, intervention group participants increased significantly their leisure-time physical activity over time from baseline to 3 months as compared to control group participants.

Conclusion

- Using socioecological interventions that are practical and consistent with the sociocultural core values of individuals that fits within the context of people's everyday lives can increase physical activity behavior.

The END

Thank You!