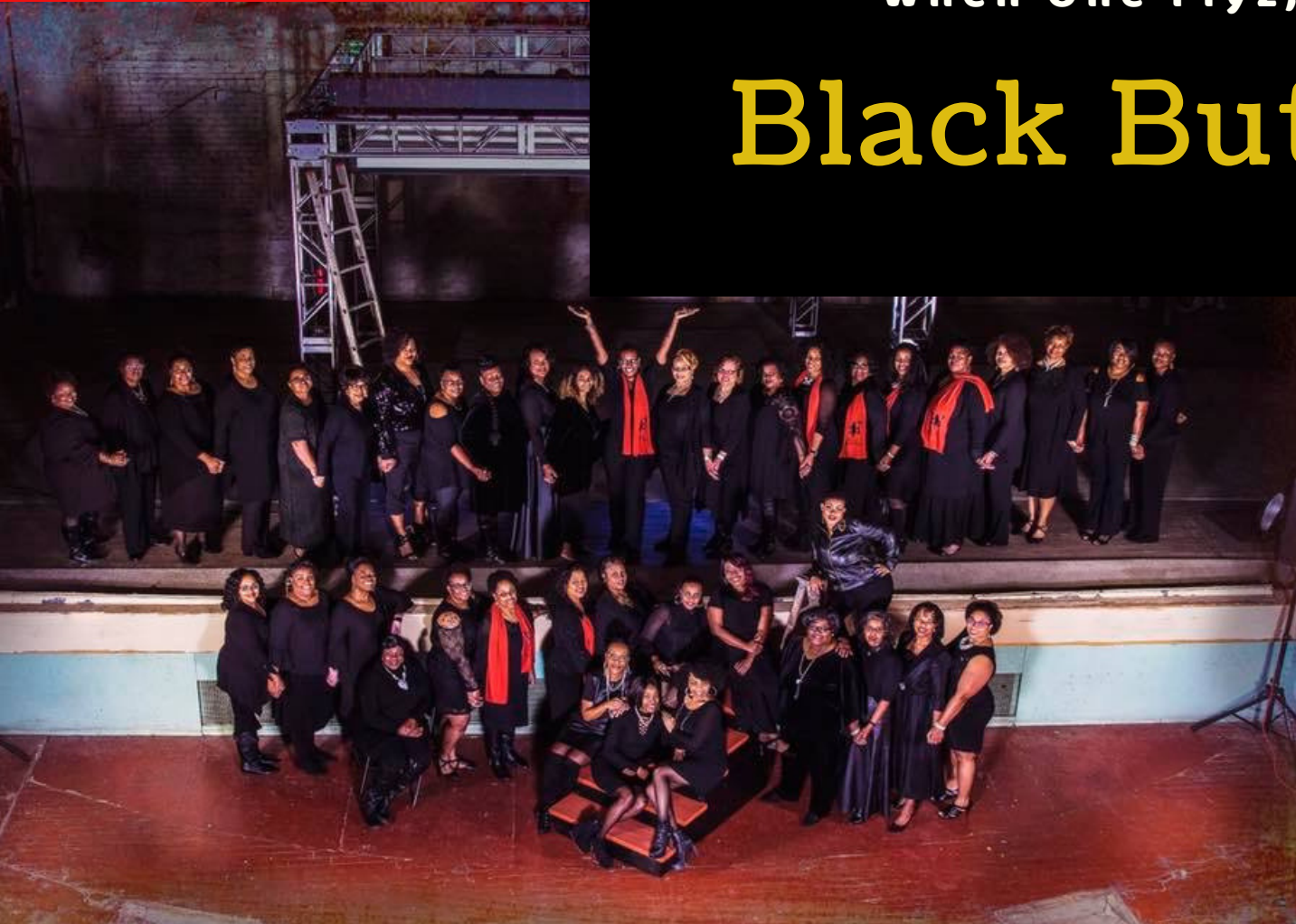


"When One Flyz, We All Fly!"

Black Butterflyz

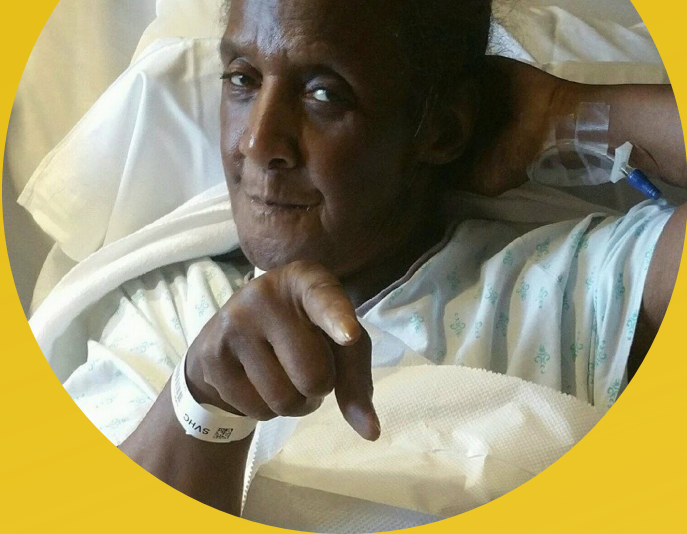


**Chris Omni
MPH Thesis
Monday, April 1, 2019**

Thesis Committee: Emily Mailey, Ph.D., Katie Heinrich, Ph.D., Nancy Muturi, Ph.D.

Back Story





Mama

**" I didn't even know her name was Clara
because she was always Mama to me.
-LeAnna Adams**



African American Women are dying at faster rates from certain chronic Diseases!

There are over 37 million African American (AA) women living in the United States and it's my mission to improve the health-related quality of life (HRQL) of as many as possible!

42%

more likely to die from breast cancer [1].

40%

more likely to die from heart disease [2].

30%

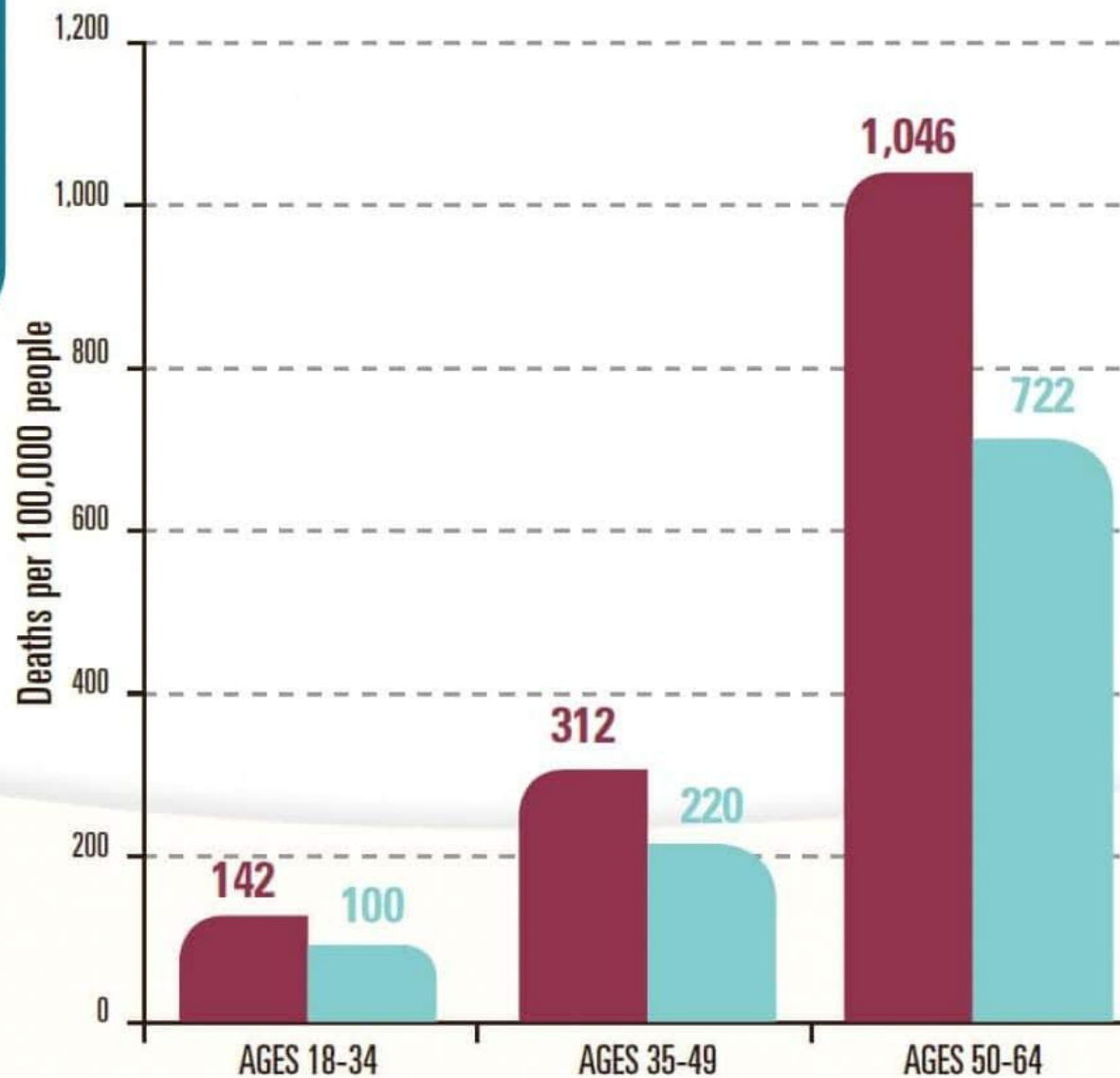
more likely to die from stroke [3].

Black Butterflyz

"WHEN ONE FLYZ, WE ALL FLY!"



African Americans are more likely to die at early ages from all causes.



Black Butterflyz target population: ages 39 - 64

Barriers to Physical Activity [4].

Barriers are not racist or sexist, but there are certain barriers that disproportionately impact Black women.

1

Lack of African American female role models engaged in physical activity

2

Lack of knowledge about physical activity

3

Lack of social support for physical activity



Black Butterflyz: Kansas Success Story [5].

Behavior Change and Communication Theories

SDT [6].

Self Determination Theory was developed by Edward Deci and Richard Ryan in the 1970s. SDT is a theory of motivation that addresses autonomy, competence, and psychological relatedness

NIT [7].

Narrative Identity Theory was developed by Dan McAdams in 1985 and explores how a person's internalized and evolving life story provides life with some degree of unity and purpose.

SCT[8].

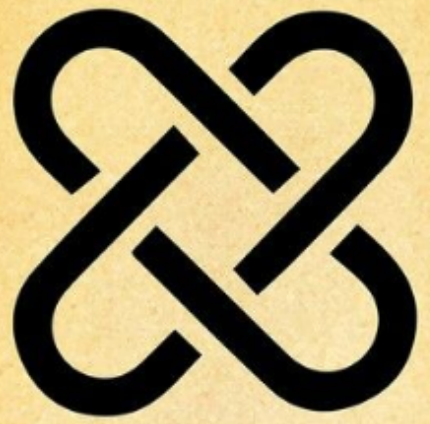
Social Cognitive Theory was developed by Albert Bandura in 1986. SCT examines the reciprocal interaction of the person, environment, and behavior

KTC

Kujima Theory of Change was developed in 2017 by Chris Omni. KTC is a culturally relevant theory of change rooted in Kwanzaa principles but informed by SDT, NIT, and SCT

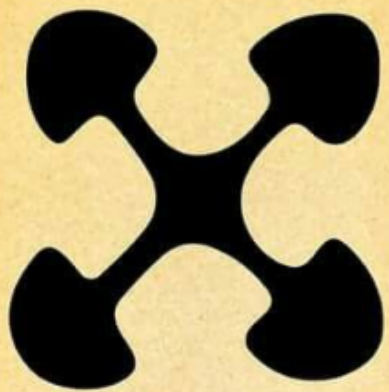
Kujima Theory of Change

[9]



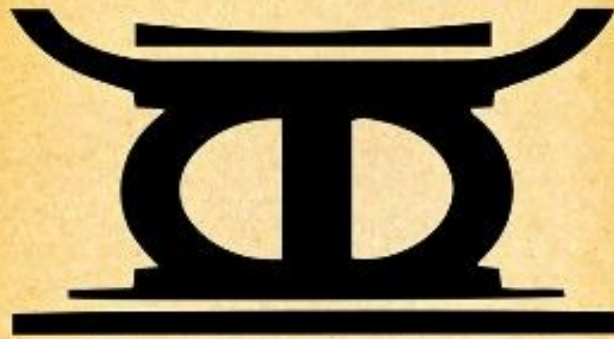
Umoja
(oo-MO-jah)
To strive for and maintain unity in the family, community, nation, and race.

Relatedness



Ujima
(oo-JEE-mah)
"To build and maintain our community together and to make our Brother's and sister's problems, our problems and to solve them together."

Social Support



Kujichagulia
(koo-jee-cha-goo-LEE-ah)
"To define ourselves, name ourselves, create for ourselves and speak for ourselves."

Autonomy



PROCEDURES

IRB Approval
Meet and Greet
Optional Biometric Screenings



STUDY DESIGN

Multi-phased
Texting Service
Facebook and Website Usage
Program Enhancement Options
Six Assessment protocols

MEASURES

International Physical Activity
Questionnaire (IPAQ)

Social Support for Exercise

Social Provisions Scale (SPS)

Treatment Self-Regulation
Questionnaire (TSRQ)

Positive and Negative Affect Schedule
(PANAS)

Cultural Leveraging And Recreational
Activity Scale (CLARAS)



[K-State home](#) » [Research Compliance](#) » [IRB](#)

Institutional Review

Procedures



facebook



Black Butterflyz
Closed group

Join Group

Study



Design



Sample IPAQ questions

The International Physical Activity Questionnaire is interested in finding out about the kinds of physical activities that people do as part of their everyday lives. [10].

During the last 7 days, on how many days did you do **vigorous** physical activities like heavy lifting, digging, heavy construction, or climbing up stairs as part of your work?

During the last 7 days, on how many days did you bicycle for at least 10 minutes at a time to go from place to place?

During the last 7 days, on how many days did you do moderate activities like carrying light loads, sweeping, washing windows, and raking in the garden or yard?

During the last 7 days, on how many days did you do vigorous physical activities like aerobics, running, fast bicycling, or fast swimming in your leisure time?



International Physical Activity Questionnaire

Physical Activity (IPAQ-Long)	Baseline (Median)	Post-intervention (median)	P-Value
Job-related physical activity	480	1935	.550
Transportation physical activity	165	198	.922
Housework, House maintenance, and Caring for Family	720	780	.635
Recreation, Sport and Leisure-time Physical Activity	198	792	.006
Moderate Intensity Leisure Time* Physical Activity	0	0	.020
Vigorous-intensity Leisure Time Physical Activity	0	0	.066
Leisure Time Walking	99	264	.007
Total Physical activity Minutes	3,162	4987.5	.106



Additional Assessment Protocols

Treatment Self Regulation Questionnaire (TSRQ) [11].

Positive And Negative Affect Schedule (PANAS) [12].

THE REASON I WOULD EXERCISE REGULARLY IS:

Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree

1. Because I feel that I want to take responsibility for my own health.
2. Because I would feel guilty or ashamed of myself if I did not exercise regularly.
3. Because I personally believe it is the best thing for my health.
4. Because others would be upset with me if I did not.

A relative autonomy index (RAI) score was also calculated.

Positive and Negative Affect Scale (PANAS)

Instructions. We are interested in how you have felt this week. Listed below are a number of words that describe different feelings or emotions that people experience. Read each item and then, using the scale provided, indicate in the space next to each item how strongly you have experienced these feelings this week.

Very Slightly or Not At All	A Little	Moderately	Quite A Bit	Extremely
1	2	3	4	5

	Rating 1-5
1. Interested	
2. Disinterested	
3. Excited	
4. Upset	
5. Strong	
6. Guilty	
7. Scared	
8. Hostile	
9. Enthusiastic	
10. Proud	

	Rating 1-5
11. Irritable	
12. Alert	
13. Ashamed	
14. Inspired	
15. Nervous	
16. Determined	
17. Attentive	
18. Jittery	
19. Active	
20. Afraid	



Additional Assessment Protocols

Social Provisions Scale (SPS) [13].

Exercise Specific Social Support [14]/

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
			Rating
1.	There are people I can depend on to help me if I really need it.		
2.	I feel that I do not have close personal relationships with other people.		
3.	There is no one I can turn to for guidance in times of stress.		
4.	There are people who depend on me for help.		
5.	There are people who enjoy the same social activities I do.		
6.	Other people do not view me as competent.		
7.	I feel personally responsible for the well-being of another person.		

none 1	rarely 2	a few times 3	often 4	very often 5	does not apply 8
-----------	-------------	------------------	------------	-----------------	---------------------

During the past three months, my family (or members of my household) or friends:

	Family	Friends
11. Exercised with me.	11. _____	11. _____
12. Offered to exercise with me.	12. _____	12. _____
13. Gave me helpful reminders to exercise ("Are you going to exercise tonight?").	13. _____	13. _____
14. Gave me encouragement. to stick with my exercise program.	14. _____	14. _____
15. Changed their schedule so we could exercise together.	15. _____	15. _____
16. Discussed exercise with me.	16. _____	16. _____
17. Complained about the time I spend exercising.	17. _____	17. _____
18. Criticized me or made fun of me for exercising.	18. _____	18. _____
19. Gave me rewards for exercising (bought me something or gave me something I like).	19. _____	19. _____
20. Planned for exercise on recreational outings.	20. _____	20. _____
21. Helped plan activities around my exercise.	21. _____	21. _____
22. Asked me for ideas on how <i>they</i> can get more exercise.	22. _____	22. _____
23. Talked about how much they like to exercise.	23. _____	23. _____

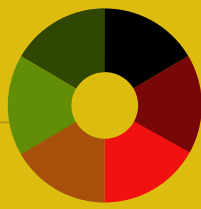
Treatment Self Regulation Questionnaire Positive And Negative Affect Schedule Social Provisions Scale Exercise Specific Social Support



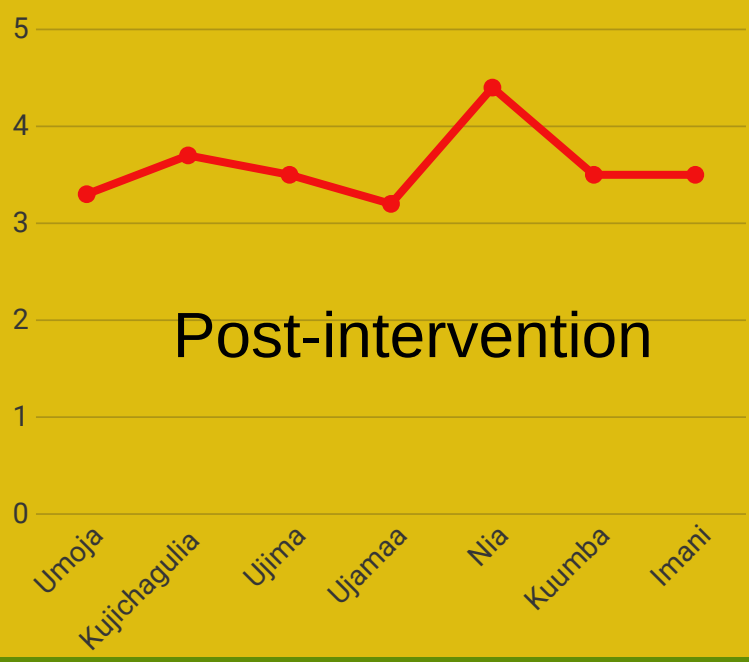
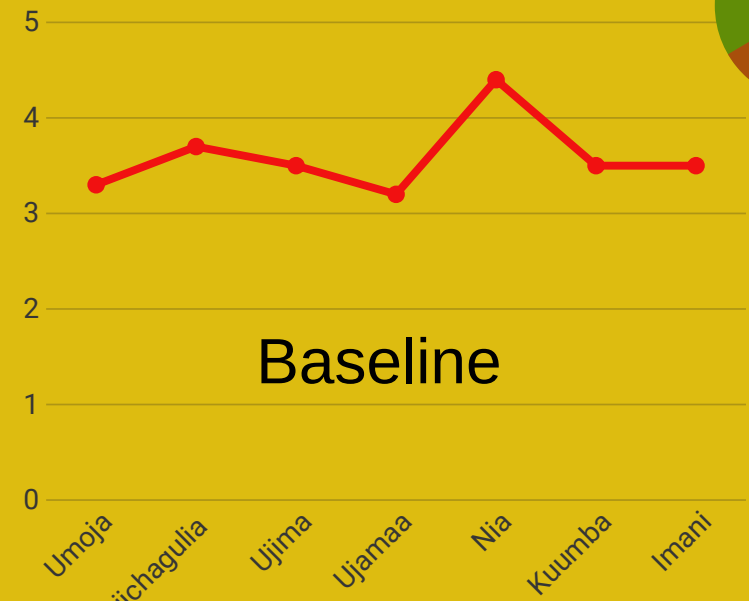
Table 4. Kujima Theory of Change Constructs

	Baseline (Mean/SD)	Post-intervention (Mean/SD)	P-value
TSRQ (Autonomy)			
RAI (Relative Autonomy Index)	3.00 (1.69)	3.15 (1.30)	.36
PANAS (Mood)			
Positive Affect	37.84 (8.39)	37.45 (9.13)	.681
Negative Affect	15.3 (4.23)	16.48 (7.06)	.277
SPS (Social Support)			
Reassurance of Worth	3.78 (.43)	3.69 (.44)	.298
Opportunity to provide nurturance	3.01 (.48)	3.25 (.52)	.002
Social Support from Friends	23.71 (11.03)	28.16 (9.3)	.003

Cultural Leveraging And Recreational Activity Scale (CLARAS)



	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. The Day 1 Principle, Unity, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The Day 2 Principle, Self Determination, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The Day 3 Principle, Collective Work and Responsibility, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The Day 4 Principle, Cooperative Economics, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The Day 5 Principle, Purpose, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The Day 6 Principle, Creativity, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The Day 7 Principle, Faith, is a driving force behind why I engage in physical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



ONE GOAL

Let's discuss it!



Black Butterflyz

The Metamorphosis



Results



**Overarching
Themes**



Limitations



Future Direction

Additional Results

Demographics

- Average age 51
- Nearly 90% had some college
- 72% worked 35 hours/wk or >
- Half made >\$45K
- 52.2% single/divorce

Retention

- 45 of the 94 participants completed the study
- 48% retention rate

Dropouts

- Lower
 - reassurance of worth ($p=.04$)
- lower positive affect ($p=.07$)
- average age 52.6

Completers

- More likely to be employed ($p=.02$)
- average age 48.6

Overarching Themes



Walking

- Preferred method of PA
- Ethics of Care application



FUBU

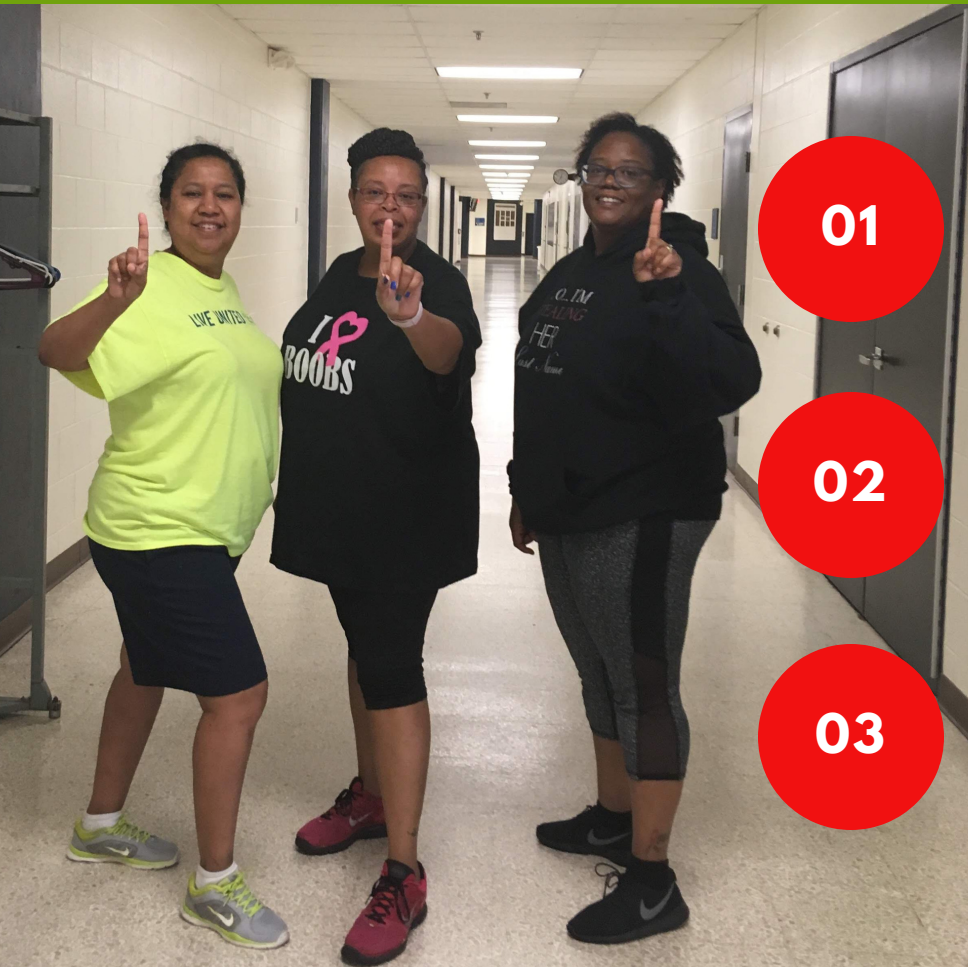
- For Us By Us
- Train Black women to become group exercise instructors



Social Support

- Positive influence on physical activity engagement
- Ethics of Care application

Three Limitations



01

Retention

02

Social Media Usage

03

Text Service Difficulties

Future Direction



DON'T JUST TAKE MY WORD FOR IT

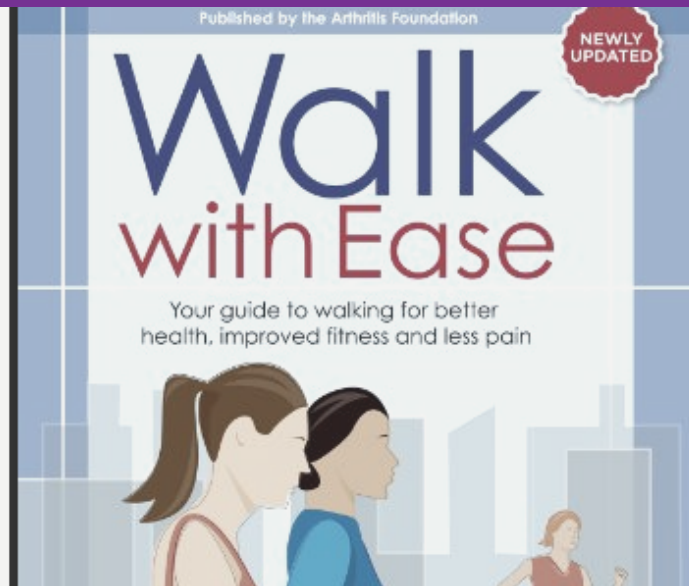
References

1. American Cancer Society. **Cancer Facts & Figures for African Americans 2016-2018**. Atlanta: American Cancer Society, 2016.
2. Centers for Disease Control and Prevention. (2019). **Heart Behavior**.
3. Centers for Disease Control and Prevention. (2019) **Stroke Behavior**.
4. Joseph, R.P., Ainsworth, B.E., Keller, C., & Dodgson, J.E. (2015). **Barriers to physical activity among African American women: An integrative review of the literature**. *Women Health*. 55(6), 679-99. DOI: 10.1080/03630242.2015.1039184
5. <https://youtu.be/mloF47mEuHI>
6. Ryan, R. & Deci, E. (2000) **Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being**. *American Psychologist*, 45(1), 68-78. DOI: 10.1037//0003-066X.55.1.68
7. McAdams, D. P., & McLean, K. C. (2013). **Narrative Identity**. *Current Directions in Psychological Science*, 22(3), 233-238. <https://doi.org/10.1177/0963721413475622>
8. Bandura, A. (2004). **Health promotion by social cognitive means**. *Health Education & Behavior*, 31(2), 143-164. DOI: 10.1177/1090198104263660

References

9. Karenga, M. (2018). The Annual Founder's Message. The Official Kwanzaa website.<http://www.officialkwanzaawebsite.org/documents/ReimaginingandRemakingtheWorld--Kwanzaa12-20-18.pdf>
10. Craig, C.L., Marshall, A.L., Sjostrom, M., Bauman, A.E., Booth, M.L., Ainsworth, B.E., ... Oja, P. (2003). International physical activity questionnaire: 12 country reliability and validity. *Medicine & Science in Sports & Exercise*, 35(8), 1381-95. DOI: 10.1249/01.MSS.0000078924.61453.FB
11. Levesque, C. S., Williams, G. C., Elliot, D., Pickering, M. A., Bodenhamer, B., & Finley, P.J. (2007). Validating the theoretical structure of the treatment self- regulation questionnaire (TSRQ) across three different health behaviors. *Health Education Research*, 22(5), 691-702. DOI: 10.1093/her/cyl148
12. Crawford, J. R., & Henry, J. D (2004). The positive and Negative affect schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*,43(3), 245-65.DOI: 10.1348/0144665031752934.
- 13.Cutrona, C.E., & Russell, D.W. (1986). The provisions of social relationships and adaptation to stress. *Advances in Personal Relationships*, 1:37-67.
14. Sallis, J.F., Grossman, R.M., Pinski, R.B., Patterson, T.L., and Nader, P.R. (1987). The development of scales to measure social support for diet and exercise behaviors. *Preventive Medicine*, 16(6), 825-36.

Field Placement Experience



Kansas Department of
Health and Environment

Portfolio Products and Competencies

18, 21, 13

Billboards

8, 18, 4

**Culturally-
Sensitive
photo voice**

19

**Pedometer
Passports**

DEAR
BLACK
WOMEN

YOU ARE...

Fantastic

BlackButterflyz.com/ACE



Billboards

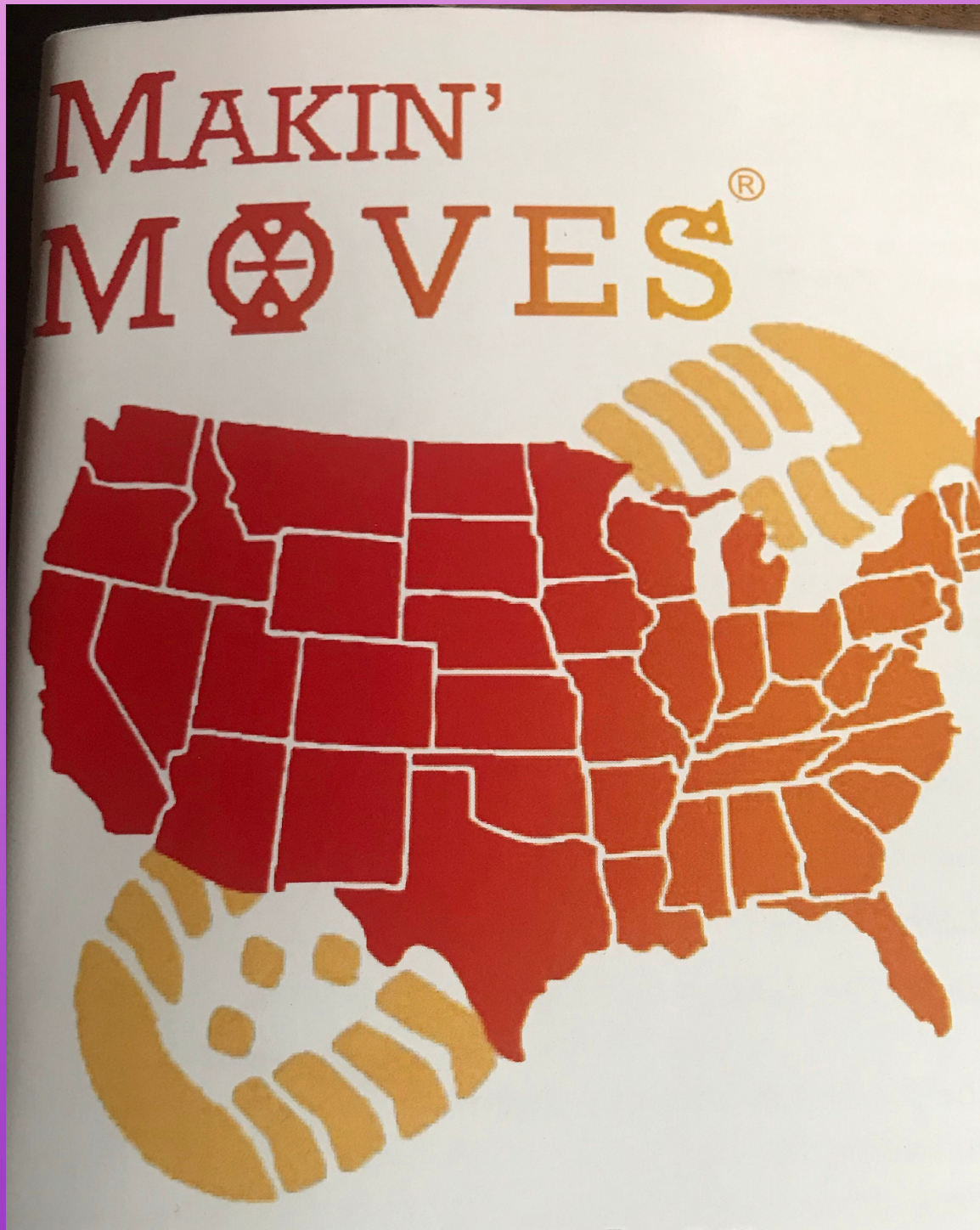
18) Select communication strategies for different audiences and sectors

21) Perform effectively on inter professional teams

13) Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.

Pedometer Passports

19) Communicate audience-appropriate public health content, both in writing and through oral presentation.





Culturally-sensitive photo voice

8) Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

18) Select communication strategies for different audiences and sectors

4) Interpret results of data analysis for public health research, policy, or practice.

K-State's MPH

Foundational Competencies that I fulfilled in the last 115 weeks

7

Assess population needs, assets and capacities that affect communities' health

8

Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.

9

Design a population-based policy, program, project or intervention

K-State's MPH

Foundational Competencies that I fulfilled in the last 115 weeks cont.

13

Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.

18

Select communication strategies for different audiences and sectors

19

Communicate audience-appropriate public health content, both in writing and through oral presentation

20

Describe the importance of cultural competence in communicating public health content

Monday

April 1, 2019

THE END

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
BP_sys_m0 - BP_sys_m6	7.842	10.854	2.490	2.611	13.074	3.149	18	.006
BP_dia_m0 - BP_dia_m6	5.053	12.058	2.766	-.759	10.864	1.827	18	.084
Pulse_m0 - Pulse_m6	5.167	12.292	2.897	-.946	11.279	1.783	17	.092
Hip_m0 - Hip_m6	.6105	2.0639	.4735	-.3843	1.6053	1.289	18	.214
Waist_m0 - Waist_m6	.51316	1.75688	.40306	-.33363	1.35995	1.273	18	.219
HWR_m0 - HWR_m6	-.0078750	.0662741	.0165685	-.0431899	.0274399	-.475	15	.641

In addition to the significant reduction in systolic BP at 6 months ($p=.006$), there was a significant reduction in waist circumference at 3 months (from 46 inches to 44.85 inches, $p=.002$).

