

Cultural Hair Practices and Physical Inactivity Among Urban African American Adolescent girls in the United States

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Background - Hair

- Pre-Slavery
 - Cultural trait
 - Braids
 - Identification
 - Age
 - Tribe
 - Social status
- Slavery
 - Adaptation of European hair styles
- Post Emancipation
 - Fitting in
 - Straightening
- Civil Rights
 - Reclaiming identity
 - Afro
- Current Day
 - Weaves
 - Braids
 - Straight
 - Natural

Background - Hair

- Biological Differences

- Shape

- Elliptical
 - Flat

- Moisture

- Uneven distribution
 - Fragile ends
 - Requires oil product

SHAPE OF THE HAIR



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Background – Physical Activity

- Recommendation:
 - Children 6-19 y/o 60 min of physical activity daily
 - Includes physical education
- Reality:
 - 2013 27% of high school students met daily recommendations
 - 2013 29% of high school students participated in Phys. Ed class daily

Type of Activity	Females	Males
Physically active at least 60 minutes/day	17.7%	36.6%
Attended physical education classes daily	24.0%	34.9%

CDC Physical Activity Facts <http://www.cdc.gov/healthyschools/physicalactivity/facts.htm>

Background – Physical Activity

African American Females

- Highest rates of inactivity
- Barriers
 - Aesthetic
 - Hair maintenance
 - Structural
 - Neighbor hood lighting
 - Crime
 - Lack of safe walkable space
 - Financial
 - Gym memberships
 - Equipment

Solutions

- Schools
 - Provide safe space
 - Gymnasiums
 - Physical education classes
- Challenges
 - Poor attendance
 - Lack of full participation
 - Time constraints

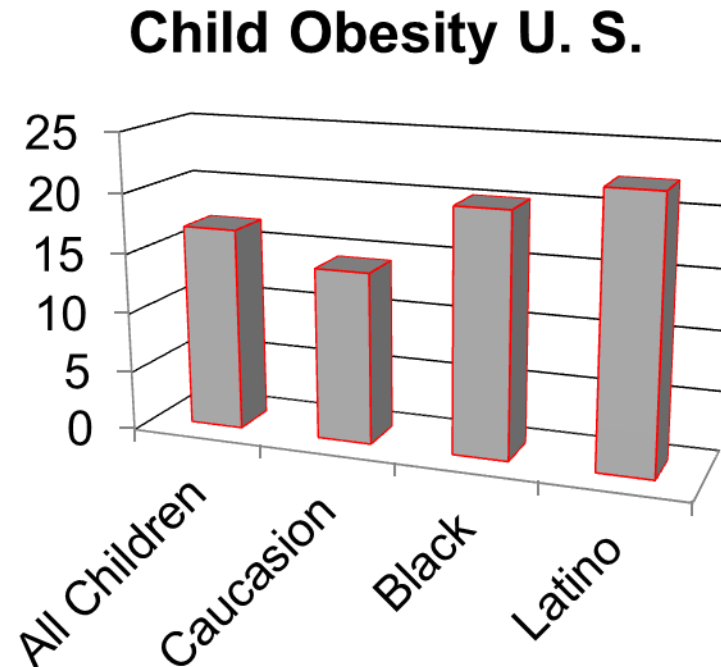
Background - Physical Activity

- Benefits
 - Improved academics
 - Improved concentration
 - Decreased mood disorders
 - Decrease risk of overweight/obesity related diseases
 - Increased sense of well-being

CDC Physical Activity Facts <http://www.cdc.gov/healthyschools/physicalactivity/facts.htm>

Background - Obesity

- In the U. S. overall decline in childhood obesity
- Disparity remains
 - All 16.9%
 - Cauc. 14.3%
 - Black 20.2 %
 - Latino 22.4%



Purpose

- Determine the relationship between urban African American girls' cultural hair practices and physical activity participation
- H_{o_1}
 - Urban African American girls who spent more money on their hair practice will have decreased participation in physical activity in and out of school.

Methods – Sample

- Convenience
 - High School Newark, New Jersey
- African American girls 9th – 12th grade
- At or below poverty level

<i>n</i>=50	Mean	Minimum	Maximum
Age	17	14	21
Grade	11 th	9 th	12 th
BMI	28.25	16	45

Underweight	Less than 18
Normal weight	18 – 25.9
Overweight	26 – 29.9
Obese	Greater than 30

Methods

- Human Subjects
 - Rutgers University IRB approval
 - Letter of support from high school principal and administrators
- Information flyers distributed at lunch, before/after school
- Flyers hung in girls restrooms, cafeteria, hallways
- Announcements: morning, phys ed. Class
- Parental consent & assent <18 y/o
- Consent \geq 18 y/o
- BMI measured Ht, Wt, DOB, gender, CDC BMI calculator
- Survey - Cultural Hair Assessment Inventory (CHAI)
- \$10.00 Dunkin' Donut card for participation

Find Your Hair Type

Type 1
Straight



Type 2
Wavy-Curly



Type 3
Curly-Kinky



Type 4
Kinky-Coily



- I like my natural hair the way it is? Yes No
- Have you done something to make your natural hair different? Yes No
- If you answered yes, how have you changed it? Straight perm Curly perm Brazillian blow-out
 Weave Extensions
- Do you cover your hair? Yes No
- If you answered yes, how do you cover your hair? Wig Hijab scarf/cloth wrap
- Is your hair braided today? Yes No
- Are you wearing locs today? Yes No
- Are you wearing an Afro today? Yes No

Results

Hair Prep	Mean	Minimum	maximum
Cost of hair service	\$38.66	\$0.00/Free	\$130.00
Time spent on hair	1hr 48 min	10 min	4hr

	Exercise Outside of School	
BMI		Pearson Chi Square
Normal weight		.277
Overwt/Obese		.000*
Cost of hair service		.847
Time spent on hair		.084
Hair Type		.264

Statistic: Crosstabs Phi Cramer's V

Results

	Do you sweat when you participate in gym class?
BMI	
Normal Weight	.538
Over weight/Obese	
Cost of hair services	.592
Time spent on hair	.015*
Hair type	.373

	BMI - Over weight/ Obese	
Hair Type		.661
Time spent on hair		.005*
Cost of hair service		.179
Time of class		.003*

Results

	Hair Type			
	Straight	Wavy-Curly	Curly-Kinky	Kinky-Coily
Nml weight	1	1	7	7
Overweight	1	4	9	17
Total	2	5	16	24

Conclusion

- Hair style had no bearing on decision to participate in activity in or outside of school.
- Cost of hair service had no bearing on decision to participate in activity in or outside of school.
- Hair type was relevant when deciding to participate in activity in or outside of school
- Time to prepare hair was relevant when deciding to participate in activity in or outside of school
- There was a significant relationship between overweight and obesity and: participating in activity, hair type, time to prepare hair and time of phys ed. class

Conclusion

- Overweight and Obese girls tend to have more difficult to manage hair.

Practice Implications

- NPs should recognize that cultural hair practices are important to African American adolescents/women
- Understand and appreciate the biological differences in hair, hair hygiene and hair practices
- Engage minority adolescents/women in culturally relevant discussion regarding hair, hair type, hair practices as it pertains to decision to exercise.

Limitations

- Small sample size; unable to generalize
- Homogenous sample; all African American
- New instrument- needs rigorous validation

Next Steps

- Repeat study with larger sample size
- Rigorous validation of the CHAI with Latino and Caucasian girls
- Analyze qualitative data
- Engage target audience/key stakeholders with the goal of developing culturally sensitive and relevant physical activity routines for adolescents and women of color.

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