

Differences in BMI, Self-Concept and Perceived Difficulty in Leading a Healthy Lifestyle between Hispanic and Non-Hispanic Teens

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Purpose

- Describe key differences in BMI, Self-Concept and Perceived Difficulty in Leading a Healthy Lifestyle between Hispanic and non-Hispanic teens in our NIH-funded trial



Significance of the Problem

- The prevalence of overweight/obesity among minority youth is higher than non-minority youth
- Latino youth are more insulin resistant than Caucasian youth
- Being overweight during adolescence is a risk factor for adult obesity, which can lead to serious co-morbidities, including Type 2 diabetes mellitus, hyperinsulinemia, hypertension, dyslipidemia, heart disease, sleep apnea, increased asthma symptoms, gastroesophageal reflux and non-alcoholic fatty liver disease

Significance of the Problem

Key factors influencing overweight in adolescents include:

- one or both parents being overweight
- decreased physical activity
- large portion sizes
- increased sedentary time
- demographic variables, such as SES
- the built environment
- school policies, including limiting time in physical education
- depression and anxiety



Significance of the Problem

- Habits, coping and healthy lifestyle behavior patterns formed during adolescence set the stage for adult behavior.
- Understanding cultural differences in variables that impact overweight/obesity is important in devising and refining interventions to reduce this public health problem.

Subjects

- The sample was comprised of 779 adolescents at 11 high schools in the Southwest United States who were participating in a randomized controlled trial to assess the efficacy of the COPE Healthy Lifestyles TEEN program on their physical, mental health and academic outcomes.

Demographics

Demographic	Entire Sample		Non-Hispanic		Hispanic	
Age in years: n (mean, SD)	779	(14.74, .73)	242	(14.86, .71)	522	(14.69, .73)
Gender: n (%)						
male	377	(48.40)	119	(49.17)	252	(48.28)
female	402	(51.60)	123	(50.83)	270	(51.72)
Grade: n (%)						
9th	389	(49.94)	85	(35.12)	297	(56.90)
10th	295	(37.87)	123	(50.83)	166	(31.80)
11th	89	(11.42)	33	(13.64)	54	(10.34)
12th	6	(0.77)	1	(0.41)	5	(0.96)

Methods

Baseline measures obtained included:

- BMI%
- Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA)
- Perceived difficulty in leading a healthy lifestyle (adapted from Fisher et al's scale)
- Self-concept, depression and anxiety (three subscales of the Beck Youth Inventory 2nd edition)

Results

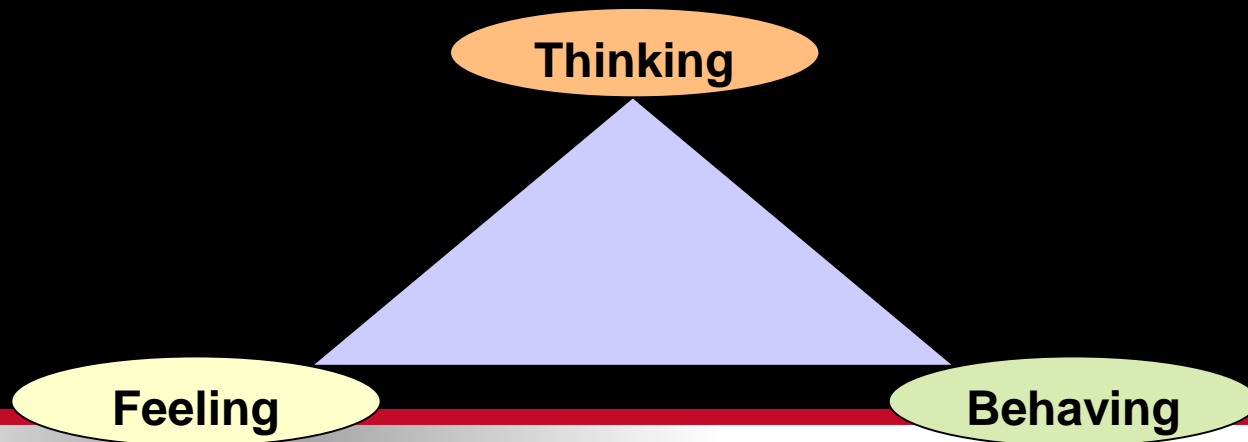
T-tests between Hispanic and Non-Hispanic					
Measure	Non-Hispanic		Hispanic		<i>p</i> - value
	Mean	SD	Mean	SD	
Beck Self-Concept	52.10	10.04	49.33	10.15	0.001
Beck Anxiety	48.98	10.58	48.10	9.64	0.261
Beck Depression	46.88	9.17	46.22	9.46	0.363
Healthy Behaviors	52.83	10.33	51.70	8.78	0.148
Perceived Difficulty	27.41	7.96	28.65	7.90	0.046

Results

T-tests between Hispanic and Non-Hispanic						
Measure	Non-Hispanic		Hispanic		p - value	
	Mean	SD	Mean	SD		
Marginalization	0.34	0.90	0.18	0.55	0.011	
Assimilation	4.53	2.76	2.22	2.41	0.000	
Separation	0.33	0.95	0.74	1.34	0.000	
Integration	2.71	2.57	4.75	2.51	0.000	
BMI Percentile	66.41	28.04	72.65	26.66	0.003	
Steps Per Day	10214	4853	9877	5451	0.494	

Implications

- Adolescence is an important time to influence healthy lifestyle beliefs and behaviors.
- Beliefs regarding living a healthy lifestyle and self-concept should be targeted as part of interventions to enhance healthy lifestyle behaviors in Hispanic teens in order to prevent and treat obesity.



Implications

- Interventions should help Hispanic youth deal with typical barriers to healthy lifestyle behaviors (e.g., active living can occur indoors if neighborhoods are unsafe)
- Cognitive-behavioral skills building can influence cognitive beliefs and self-concept
- More RCTs and dissemination/implementation studies are needed with minority youth

Contact Information

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