# Cultural Relevance of the Healthy Choices Intervention Program



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## Acknowledgements

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- The Healthy Choices Intervention program was, originally, an adaptation of the adolescent COPE Healthy Lifestyles TEEN Program. Many thanks to Dr. Bernadette Melnyk.



#### Statement of the Problem

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 Very few intervention programs have been initiated within the *primary care setting* to evaluate the psychosocial and physical outcomes of intervention strategies for the overweight and obese school-age child.



## **Expert Committee Recommendations To Address Pediatric Obesity**

- Begins with an assessment of the family's current lifestyle, medical and behavioral risks, attitudes, and family history.
- Developmental, family-centered approach.
- Encourages the use of Motivational Interviewing to guide practitioners in promoting healthy weight in youth.
- Evidence supports a staged approach to the treatment of obesity.

# Translating Recommendations into Practice

- Assessment of every child at every encounter to include BMI, attitudes for change, and nutrition and physical activity behaviors.
- Training of providers and entire staff in the adoption of new tools and practices for management of overweight/obesity.
- Address changes in health systems in order to prompt providers to initiate interventions.



# Interventions for Overweight/Obese School-Age Children

- Weight loss outcomes for school-age children have been disappointing.
- Many intervention programs in schools and in the community show short-term efficacy but demonstrate no long-term success.
- There is not sufficient support for the effectiveness of one intervention over the other.



## Interventions for Overweight/Obese School-Age Children

- What we do know from prior research:
  - Families are more likely to choose a healthy lifestyle if the intervention includes:
    - 1) **Multi-components** (nutrition education and promotion of physical activity)
    - 2) Parent involvement
    - 3) Cognitive Behavior Skills Building
    - 4) Components that address the **psychosocial factors** that influence the child and family
    - 5) Cultural relevance

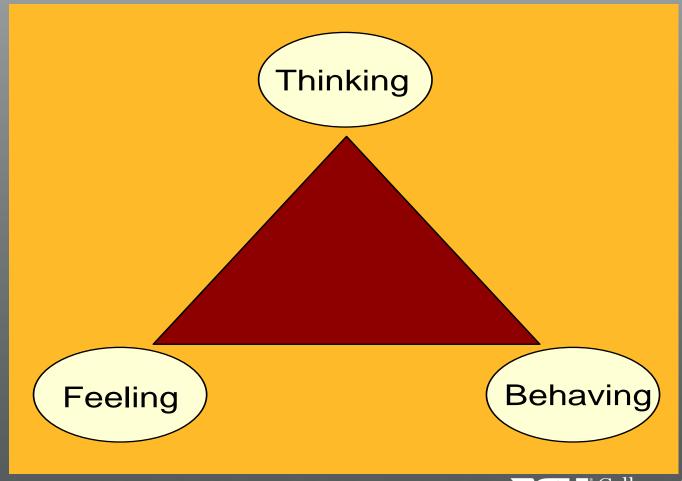


#### **Health Disparities' Influence on Obesity**

- Social and economic disadvantage adds to the complexity of creating and delivering healthy lifestyle interventions to families.
- Research is needed to clearly test
  effective ways of integrating culturally
  appropriate intervention components for
  Hispanic/Latino youth and their families.



## **Cognitive Theory**





# Cognitive Behavior Skills Building Therapeutic Process

- Determination of Cognitive Development
- Assessment of Readiness to Change
- Motivational Interviewing to determine child and family goals and focus on discrepancies between current beliefs and health status and desired outcomes
- Assessment of Negative Schema
- Focus on Problem Solving

## Cognitive Theory: Techniques to Effect Behavior Change

#### Cognitive Behavior Skills Building

- Self monitoring
- Goal setting
- Problem solving
- Restructuring negative thoughts
- Coping strategies
- Cue recognition for behavior and emotions
- Knowledge attainment

#### Behavior Modification

- Self monitoring
- Goal setting
- Behavior contracting
- Modeling
- Environmental stimulus control
- Rewards and positive reinforcement



#### **Healthy Choices Intervention: Pilot #1**

- First pilot study: determined feasibility and acceptability and preliminary efficacy of a 7-session CBSB intervention for overweight and obese school-age children 9-12 years of age.
- Delivered within the primary care setting.
- Intervention was manualized.
- Child and parent received notebooks that contained all sessions.

#### Pilot #1: Research Questions

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What are the preliminary effects of the HCI on: a) healthy nutrition and physical activity knowledge; b) healthy lifestyle beliefs, choices, and behaviors; c) selfesteem, anxiety, and depressive symptoms; and d) social competence in overweight and obese 9-12 year old children as measured by the child and parent report?



#### Pilot #1: Research Questions

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What are the preliminary effects of the HCI on: a) healthy nutrition and physical activity knowledge; b) healthy lifestyle beliefs, choices, and behaviors; and c) anxiety and depressive symptoms of the parents of overweight and obese 9-12 year old children as measured by self-report?



#### Pilot #1: HCI Content

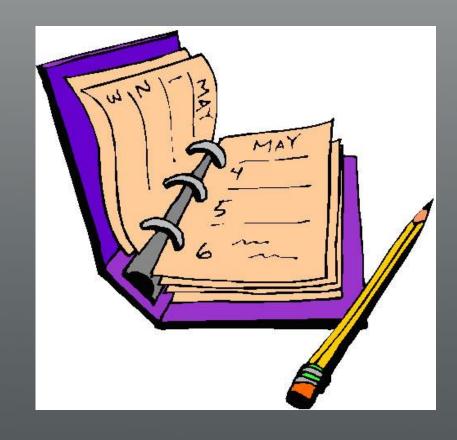
1	Clinic	Thinking-Feeling-Behaving Triangle; Setting goals; Habits and triggers; Pedometer log, Food diary, Parental modeling and support
2	Telephone	Discussion of take home activities and log completions; Positive thinking and self-talk; Self-esteem, Teasing
3	Clinic	Discussion of take home activities and log completions; Nutrition knowledge and behaviors; Goal-setting; Stoplight Diet, Portions, Eating out; Cue recognition for negative thoughts and feelings
4	Telephone	Discussion of take home activities and log completions; Food labels, Portions, Stoplight Diet; Problem solving social situations and barriers

### Pilot #1: HCI Content

5	Clinic	Discussion of take home activities and log completions; Physical activity promotion, Stretching exercises; Problem-solving for barriers to physical activity
6	Telephone	Discussion of take home activities and log completions. Problem-solving social situations; Coping with stress; Relaxation techniques; Problem-solving for teasing, isolation, bullying
7	Clinic	Discussion of take home activities and log completions; Integration of PA, Nutrition and Emotional healthy choices knowledge and skills; Emphasis on Thinking-Feeling-Behaving Triangle, Positive thinking, Goal setting and Problem solving.

#### **HCI Intervention Materials**

- Parent and child intervention notebooks
- Pedometers and Pedometer Logs
- Food diaries
- Goal Achievement Records





Breakfast	Linghton	Dianar	Dische Hangaritmation
Cooker crup	mac &	Chise.	apple
	coke	grangechido	one of togeton
Casher Onop	Cookie Cookie brownie	egge (smalet)	
Corkie Crusp		chicken alfodeo	
	Casher Orrop milk	milk Cookie brownie	Coskie orige Chece Sood orangechido to hell cookie with elever province originale orig

#### Healthy Choices Intervention Goal Setting & Self-Monitoring Log Week #\_\_\_\_

Record this week's goals for Nutrition, Physical Activity and Thinking. Make an "X" on the days of the week that you accomplished your goals.

My Goals: Nutrition		Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Goal #1	Example: Eat 5 servings of fruits and vegetables every day	X	X	1	X	×	×	
Goal #2	I have to east 20 gram of	×	Х	K	X	4.	1	
Goal #3	Stop earing Condy and Junit Food ben'n the moment	+	X	X	y	y	X	
Goal #4			- 45					

## Healthy Choices Intervention Goal Setting & Self-Monitoring Log Week #

Emotions How have you felt this week? Rate your emotions on a scale from "0" = not at all to "10" = a lot	Non	Tues	Wed	Thurs	Fri	Sat	Sun	1
Worried			1	0	0	0	0	1000
Stressed			0	and .	0	0	0	
Happy			10	4	10	10	10	
Sad				10	0	D.	D	
Frustrated			10	Oh.	0	0	0	
Angry			0	10.	0	0	Q	
Excited			10	0	100	0	0	

#### Here is where you keep track of your pedometer steps!

Pedometer Steps	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Total Steps
Zero your pedometer every morning	0	B	0	0	1562	13291	0	25443

### **Child Participants (N = 17)**

- Mean age: 10.75 years (SD=1.26 years); range=9 to 12.6 years)
- Mean BMI: 26.09 (SD=3.13); range=21.11-31.38
- Mean BMI%: 96%
   (SD=.04): range=.86-.99
- Mean BMIz: 1.91 (SD=.42);
   range=1.08-2.43
- 65% Caucasian; 35% Hispanic
- 65% female



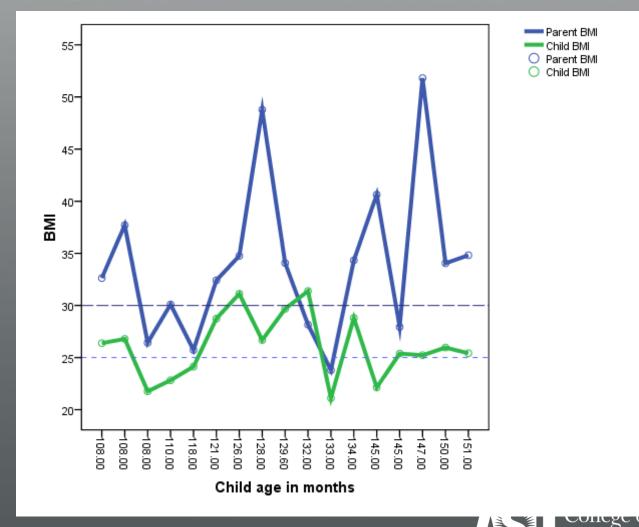


### Parent Participants (N = 17)

- Mean age: 39.76 years
   (SD=7.92); range 28-56 years
- Mean weight (kg): 90.90
   (SD)=23.39; range=60.87-145.60
- Mean BMI: 34.01 (SD=7.56);
   range=23.79-51.80
- 65% Caucasian; 35% Hispanic
- 94% female



#### Comparison of Parent and Child BMI



#### Pilot #1: Effects of the HCI--Child





### Effects of the HCI: Child

	<b>T0</b>	<b>T1</b>	t	d	p
	Mean (SD)	Mean (SD)			
BMI	26.1 (3.1)	25.1 (3.3)	6.2	.31	.000
BMI percentile	.96 (.04)	.94 (.05)	4.5	.38	.000
BMI z score	1.9 (.42)	1.7 (.45)	6.5	.42	.000
Beliefs	62.8 (6.3)	65.9 (8.8)	-1.2	.40	.234
Choices	67.3 (7.8)	70.3 (9.6)	85	.33	.410

#### **Effects of the HCI: Child**

	T0 Mean (SD)	T1 Mean (SD)	t	d	p
Behaviors	56.5 (12.3)	71.0 (6.4)	41	1.55	.001
Activity	5.0 (1.2)	7.3 (.59)	-8.4	2.49	.000
Nutrition	6.35 (2.3)	10.0 (.93)	-7.3	2.29	.000
Self Concept	49.9 (12.2)	53.0 (11.6)	92	.26	.375
Anxiety	52.6 (13.7)	49.4 (12.1)	.50	.25	.624



### **Effects of the HCI: Child**

	T0 Mean (SD)	T1 Mean (SD)	t	d	р
Depression	50.5 (13.9)	45.9 (9.7)	1.15	.38	.268
Parent Report of child PA	1.88 (.99)	2.60 (1.3)	-2.07	.63	.057
Child Report TV hrs/day	2.94 (1.1)	2.33 (.98)	1.31	.57	.212
Child Report of PA	2.47 (3.13)	3.60 (2.06)	-2.12	.51	.052
Servings of fruit/day	1.59 (1.33)	2.00 (1.25)	-1.43	.32	.173



#### Pilot #1: Effects of the HCI--Parent





### **Effects of the HCI: Parent**

	T0 Mean (SD)	T1 Mean (SD)	t	d	p
Beliefs	64.8 (5.8)	68.5 (5.1)	-1.97	.66	.069
Behaviors	55.6 (7.0)	69.4 (7.9)	-5.59	1.8	.000
Activity	10.2 (1.5)	11.8 (.41)	-5.07	1.6	.000
Nutrition	16.0 (3.5)	19.6 (.63)	-4.29	1.7	.001
State Anxiety	62.1 (25.9)	50.07 (9.9)	2.02	.67	.063



# Effects of the HCI: Parent Report of Child Behaviors

	T0 Mean (SD)	T1 Mean (SD)	t	d	р
Social Cooperation	9.9 (3.51)	11.2 (3.51)	1.41	.36	.180
Social Self Control	11.6 (4.0)	12.7 (3.2)	-21.8	.30	.000
Externalizing Problem Behaviors	4.8 (2.96)	3.5 (2.83)	2.54	.47	.023
Parent report TV viewing (hours/day)	3.1 (1.60)	2.5 (1.55)	2.47	.38	.027



#### Pilot #2: HCI Cultural Relevance

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 The purpose of Pilot #2 was to determine the acceptability, applicability and cultural relevance of the *Healthy* Choices Intervention (HCI) program for underserved, Hispanic overweight and obese 9 to 12 year old children and their parents who utilize the healthcare services at an inner city pediatric primary care clinic. ollege of Nursing

#### Pilot #2 HCI Cultural Relevance

- Focus Group with Primary Care Providers
  - Recommendations:
    - All sessions to be held in person at the clinic
    - Session scenarios and food references adapted to reflect cultural influences on diet
    - Physical activity recommendations adapted to emphasize group and family activities
    - Demographic questionnaire shortened and simplified

#### Pilot #2: Cultural Relevance

- In preparation for the first phase of the study, the HCI program materials are translated into Spanish and back translated into English by certified translators.
  - Delayed preparatory phase to initiate study
    - Difficulty locating and hiring certified translators
    - Once hired, initial translator (English to Spanish) was slow to complete work due to competing demands
    - Back translator (Spanish to English) slow to complete work due to family crises

#### Pilot #2: HCI Cultural Relevance

- Due to the delay in obtaining translation of materials, Phase 1 of the study began with a small number of Hispanic families who are English speaking.
- Input from the Provider Focus Group informed the *Healthy Choices Intervention* program revisions.



#### Pilot #2: HCI Cultural Relevance

Session	HCI Session Content
1	Introduction to Healthy Choices for Healthy Lifestyles
2	Positive Thinking, Positive Self-Talk and Self-Esteem
3	Healthy Nutrition Choices and Physical Activity 5-2-1-0 Let's Go Portion Sizes
4	Recognizing Barriers to Achieving Goals
5	Physical Activity and Health Coping with Stressful Social Situations Effects of Stress on Health
6	Goal Setting and Problem Solving 5-2-1-0 Let's Go
7	Healthy Choices Each and Every Day Putting It All Together For a Healthier You





#### Cultural Relevance of the Healthy Choices Intervention Program







#### Is your child. . .

Phone number:

- 9 to 12 years old?
- Too heavy for his or her age?
- Hispanic or Latino?

#### Are you (as the parent or legal guardian). . .

- · Ready to make some diet and activity changes in your family's life?
- Wanting to learn more about getting healthy with a FREE 7-week Healthy Choices Intervention Program?
- · Hispanic or Latino?

If you would like to take part in this research study, please complete the following information and put this paper in the envelope at the front desk. Dr. Diana Jacobson from Arizona State University, College of Nursing and Health Innovation will then call you to tell you more about the study.

Parent's name (please print):	
Child's name and birthdate:	

500 North 3<sup>rd</sup> Street, Phoenix, AZ 85004 Phone: 602.496.0863 • Fax: 602.496.0886 E-mail: nursingandhealth@asu.edu WEB: www.nursingandhealth.asu.edu

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INFORMATIONAL RECRUITMENT LETTER
(AVAILABLE IN SPANISH) GIVEN TO PARENTS OF CHILDREN WHO MET THE INCLUSION CRITERIA



#### Pilot #2: HCI Cultural Relevance

- Phase 1. Deliver HCI
  - 5 child and parent (legal guardian) dyads have completed the intervention.
  - 2 children/grandmother dropped from study after the 3<sup>rd</sup> session
    - Oldest sibling reported sexual abuse from an uncle living within the home
    - Grandmother allowed the child continued contact with this person after reporting. CPS removed both children from the home.

#### Pilot #2: HCI Cultural Relevance

- Phase 2. Focus Groups Ongoing
  - Initial focus groups (child and parent) with English speaking families (5 dyads) is completed.
  - The next focus groups will be with Spanish speaking Hispanic/Latino families that have completed the intervention.



#### Pilot #3: HCI for Homeless Teens

- ASU/Mayo Seed Grant funding
  - Pls: Diana Jacobson and Dr. James Levine
- Homeless female adolescents between the ages of 11-18 years.
- All with a history of abuse (physical or sexual).
- Many with history of prostitution or victim sex trafficking



#### **Pilot #3: HCI Homeless Teens**

- The HCI has been revised to be delivered in a group format once a week for 10 weeks.
- Additional physical activity and nutritional cooking sessions have been added.
- Ongoing support and activities planned for the next 3 months.



#### Conclusion

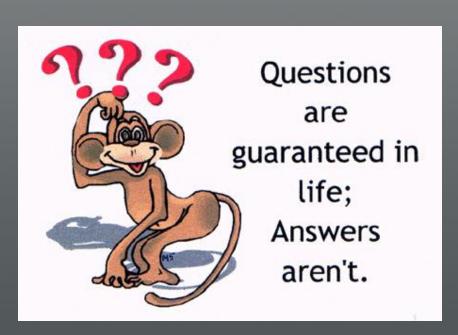
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 Healthy lifestyle interventions for primary care and community settings must be adapted to address the cultural needs of individuals and communities in order to improve desired outcomes.





## 谢谢



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