

Increased Walking Following a Culturally Adapted Obesity Intervention For Low-Income Latina Mothers with Preschool Children



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There is nothing to disclose

Purpose



Test the feasibility of a culturally relevant obesity intervention program for low-income Latina mothers with preschool children

Aims

- 1) Increase walking in mothers
- 2) Improve maternal beliefs and knowledge about physical activity and self-efficacy about modeling health behaviors.

Background



- 20% U.S. preschooler are overweight or obese
 - Mexican Americans (33.3)
 - Non-Hispanic Blacks (28.9%)
 - Non-Hispanic Whites (23.8%)
- Early age obesity tracks into adulthood
- Modifiable behaviors (e.g. physical activity)
- National directives to identify effective interventions
- Culturally appropriate interventions are needed
 - Studies are still nascent and limited
 - Few are culturally appropriate

Ogden et al, 2012

Nader et al, 2006

Summerbell et al, 2009

IOM, 2007

Intervention Strategies



- Culturally relevant interventions
 - Promotora Model: community health workers
 - Community engaged approach

Ayala, et al, 2010

Castro, et al, 2004

Deitrick, et al, 2010

CTSA Consortium, et al, 2011

Parent Focused Strategies



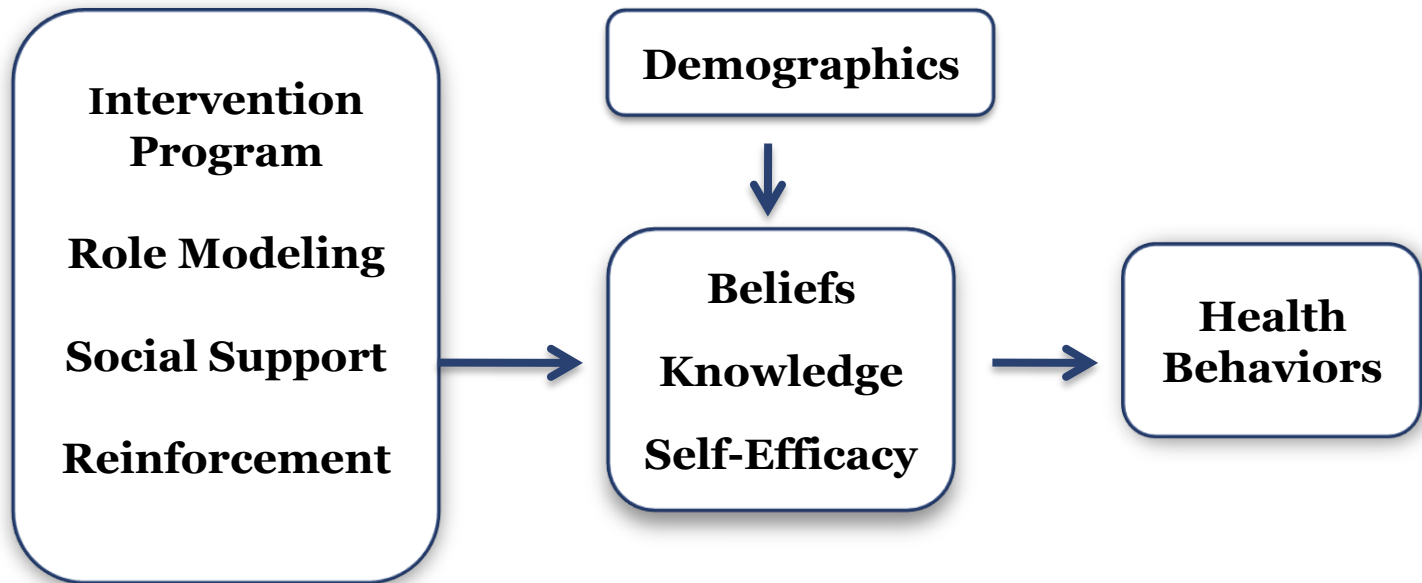
- Parent focused interventions effective
- Latino parents desire to learn healthy behaviors
- Parental beliefs, knowledge and self- efficacy influences choice

Boutelle, 2011

Klohe-Lehman, 2006

Cardona 2009

Social Cognitive Learning & Health Promotion Model



Bandura, 1989
Pender and Pender, 1987

Methodology

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Design:

- Sequential mixed method
(qualitative > quantitative)
- Single group pretest / posttest

IRB approval obtained

Community Setting

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Southern California Federally Funded Health Center

- > 60% low-income Latinos
- Health promotion programs for > 30 years
Promotora/health educator model
- Cultural competence required by investigators !

Sample

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- Recruited 43 mother-child dyads
- Final sample N=33

Inclusion – low-income Latina mothers with preschool children (3-to 5-years-old)

Exclusion – mothers and children unable to walk together

Program Design

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Intervention Program

- 9-month program promotora-led
- 4 interactive group lessons (over 2 months)
- 6 monthly community group activities
- Final review group lesson

Raising Strong Healthy Children



Pedometers for Maternal Walking

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- Daily walks – 30 minutes
- Omron HJ-113



Sugden, et al (2008) BMC
Health Services Research

Community Engaged Approach

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Stake Holders

- Health promotion coordinators
- Health care providers
- Focus groups
- Pilot test of surveys

- Promotores
- Participants

Program development

Qualitative data

Ongoing adaptations

*CTSA Consortium et al, 1997 (2011)
Eremenco et al, 2005*

Qualitative Data Analysis

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Content Analysis

Identified Common themes

3-step Process

- Preliminary group analysis
- Individual analysis
- Group consensus

Program Adaptation

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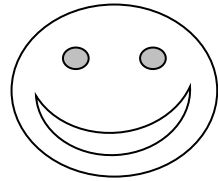
Group Lessons

- Promotora-led program
- Bi-weekly morning meetings
- Interactive group lessons
- Video and power point
- Access to children

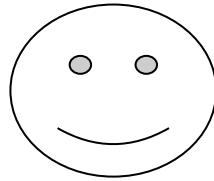


Adaptation of Likert Scale

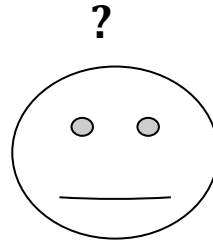
Before



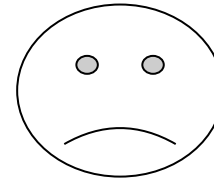
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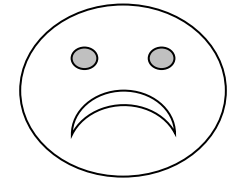
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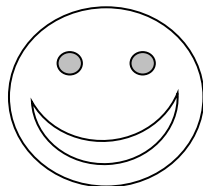


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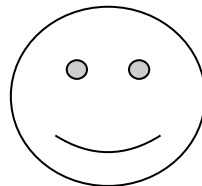


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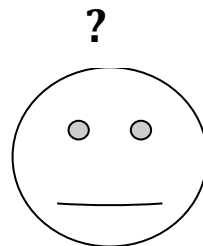
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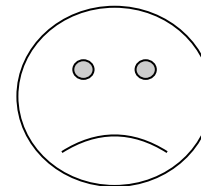
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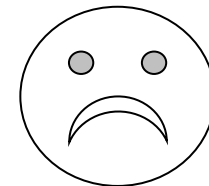
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No



**Totalmente
No**

Quantitative Data Collection

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Survey

- Program Evaluation Survey

Pedometer step counts

Tuesday & Saturday

3 time points

- Baseline
- Post-program (*9-months*)
- 6-month follow-up (*15 months*)



Quantitative Data Analysis



SPSS version 18.0

Pre- to post- program differences

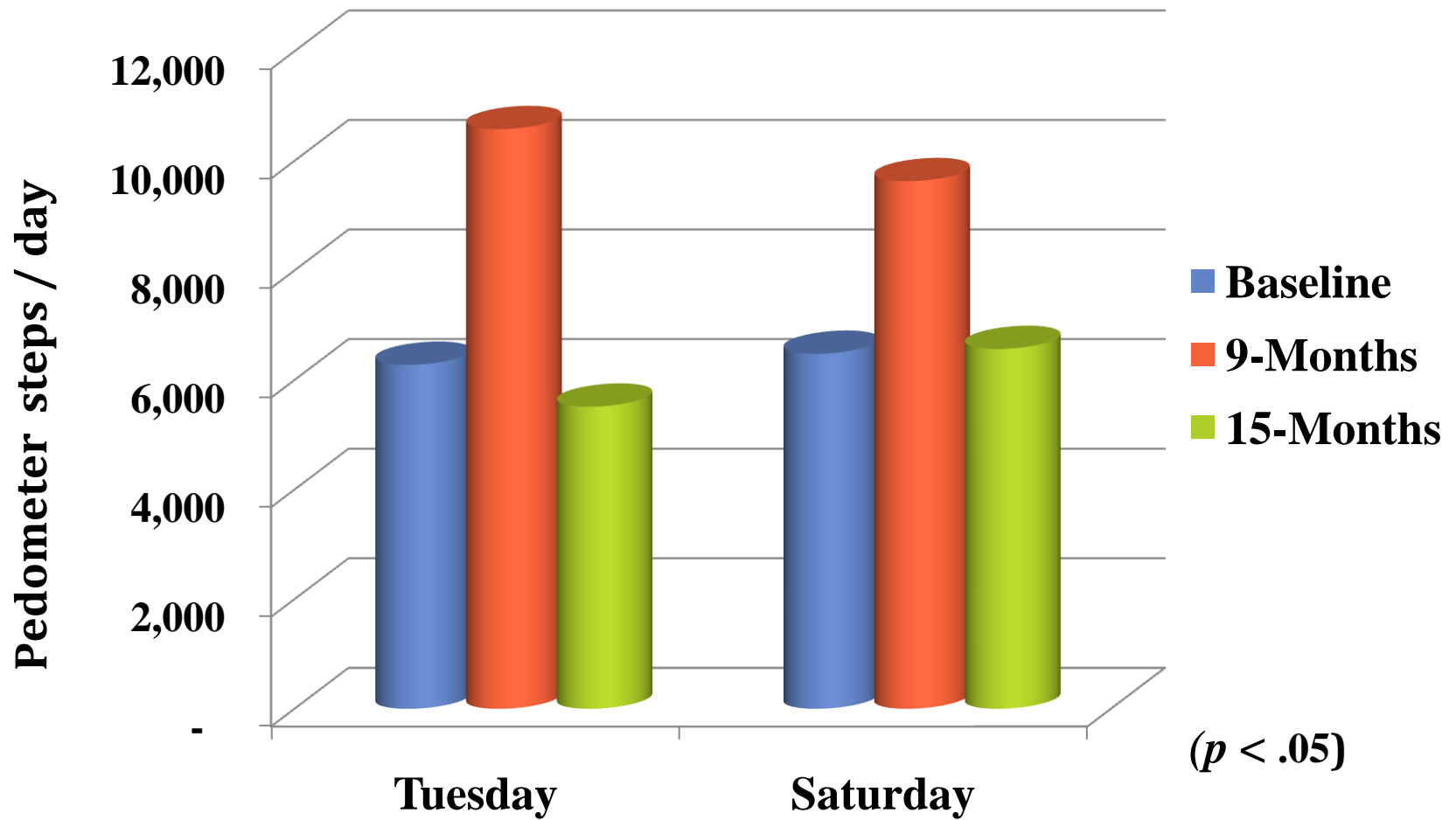
- Descriptive statistics
- Matched pairs *t*-test
- Wilcoxon signed ranks test
- Chi-square test

Demographics

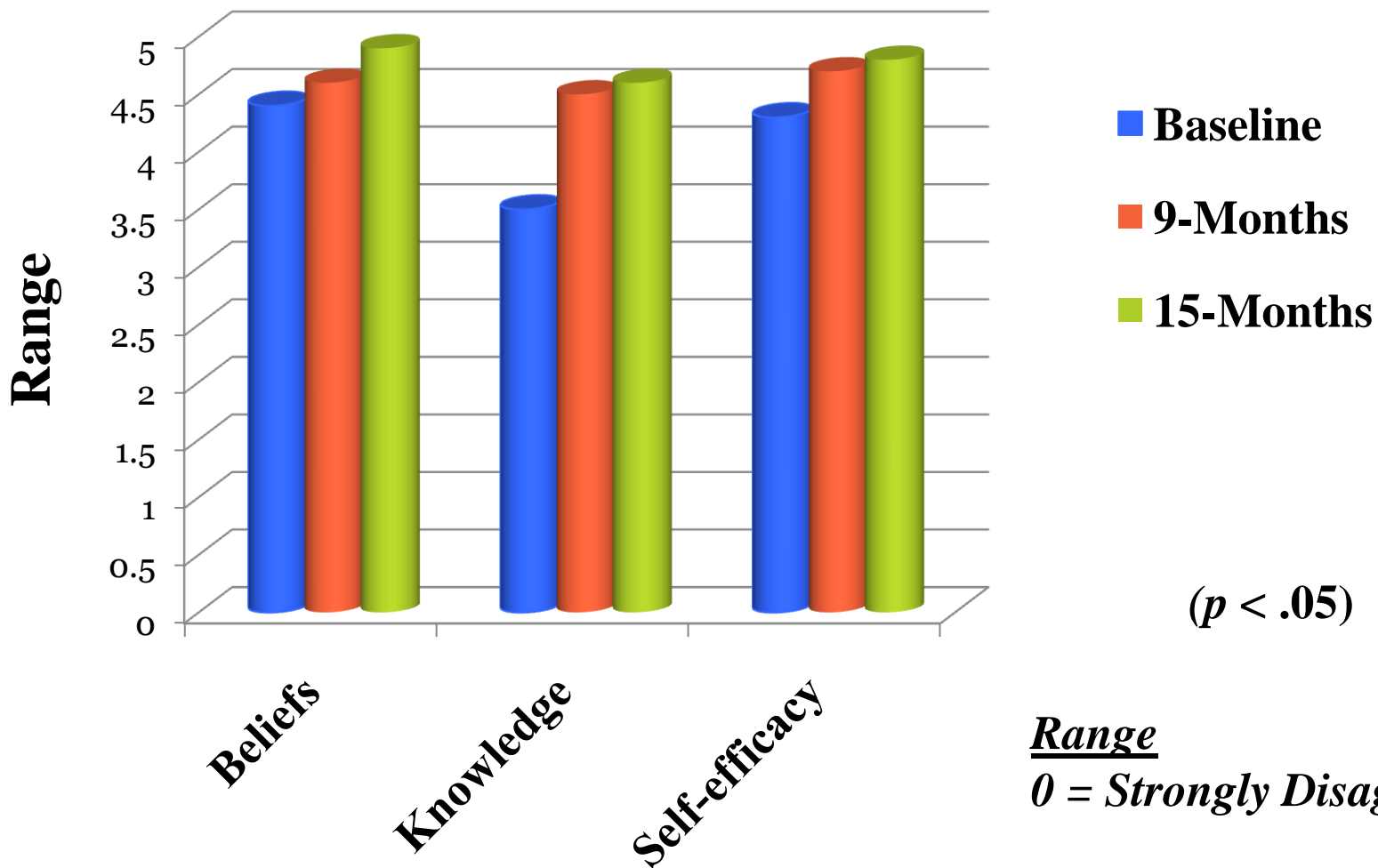
<u>Mothers (N=33)</u>	<u>%</u>	<u>or</u>	<u>mean (SD)</u>
Age			27.3 (3.7)
Ethnicity – Mexican	100		
Language - Spanish	97		
SES - Under 100% PL	88		
Education - 1 – 4 years	76		
Years lived in U.S.			7.2 (5.2)
 <u>Children (N = 33)</u>			
Age			3.6 (0.66)
Female	52		

Pedometer Step Counts

Baseline, 9 months, and 15 months



Maternal Beliefs, Knowledge and Self-efficacy Baseline, 9 months, and 15 months



Conclusions



A culturally relevant intervention was feasible in improving target health behaviors for a Mexican community

At the 6 month post-program follow-up:

- ★ Improved maternal beliefs, knowledge and self-efficacy were sustained
- ★ Increased maternal walking was not sustained

A maintenance phase may be needed to prolong health behavior changes

Implications



- ✦ Interventions for ethnically diverse populations should be culturally adapted and linguistically tailored following standardized guidelines

- ✦ **Next Steps**
 - 1) test an enhanced obesity intervention with a maintenance phase
 - 2) test intervention influence on maternal and child BMI, and children's physical activity levels

Acknowledgments

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Promotores / Health Educators



Raising Strong Healthy Children

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Bender MS, Clark M. Cultural Adaptation for Ethnic Diversity:
A Review of Obesity Intervention for Preschool Children.
California Journal of Health Promotion. 2011;9(2):40-60.