

Using Text Messaging as a Healthy Lifestyle Promotion Strategy in a Cancer Prevention Program for Urban Latino Families

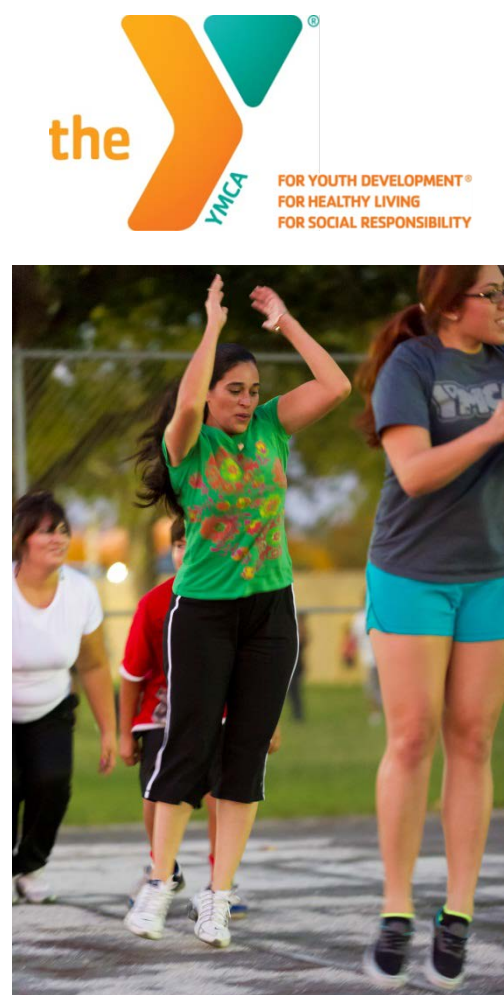
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Introduction

Cancer is the leading cause of morbidity and mortality among Hispanics, the fastest growing segment of the U.S. population. Compared to the general population, Hispanics have disproportionately high rates of two cancer risk factors: obesity and physical inactivity. Healthy weight and active lifestyle are critical to reducing cancer risk in the Hispanic community.

Program Background

“Y Living: A Healthy Lifestyle Program for Cancer Prevention and Risk Reduction” was designed by researchers with input from the YMCA of Greater San Antonio to use several methods to promote healthy lifestyles among Hispanics.



163 families (237 adults) enrolled in Y Living, a 12-week program to increase families' physical activity, improve diet quality and prevent excess weight gain.

Text messaging enhanced the Y Living program. Messages included:

YLiving4Health Texts

Community-wide education and outreach campaign 2-3/week to promote awareness of cancer prevention and risk reduction.

Y Living Program Texts

Messages from program coordinators 2-3/week:

Broadcast (one-way messages):

- Connect participants to free/low cost community events/resources
- Reinforce knowledge and skills
- Provide ongoing social support

Polls (requesting text in response):

- Assess participant knowledge

Methods

Evaluation Design

- Single group, pre- and post- surveys

Data Collection

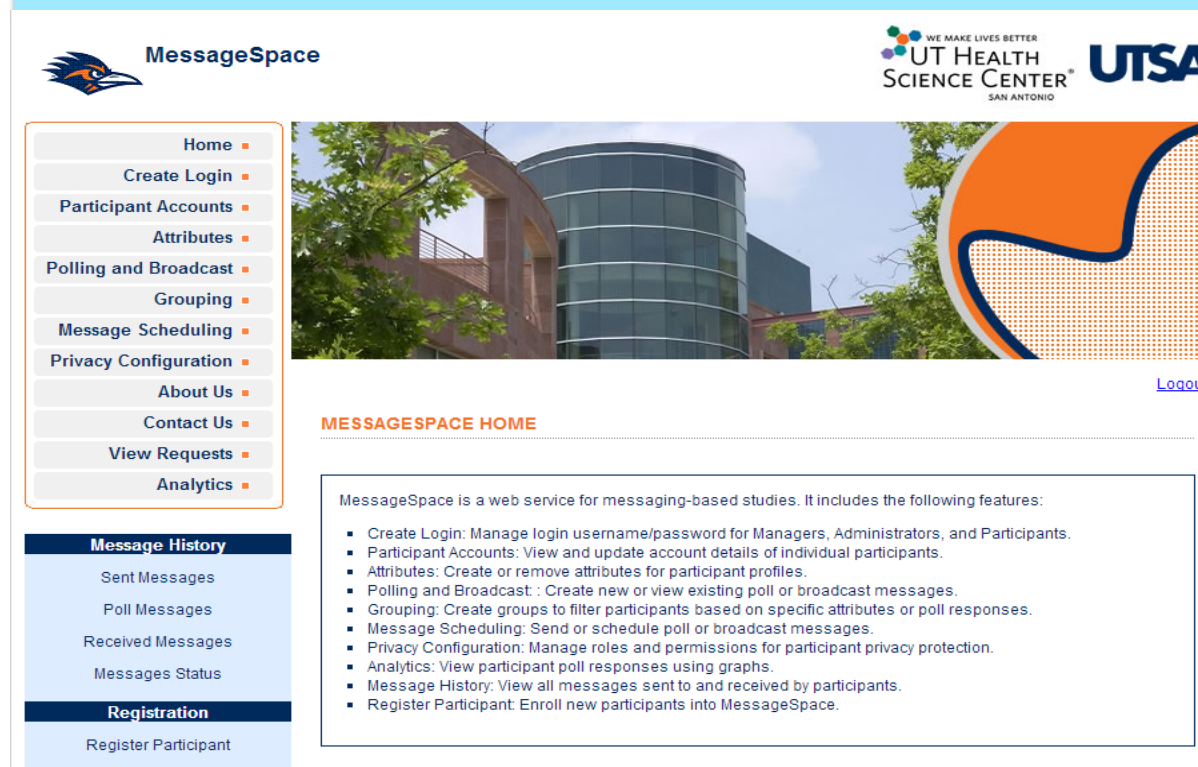
- Self-administered surveys (diet, physical activity, health & behavior knowledge)
- Anthropometrics

Adult Demographics

Gender	20% Male (n=47)	
	80% Female (n=190)	
Age (years)	Age range	18-71
	Mean \pm SD	42 \pm 13.18

MessageSpace is a web-based text-messaging communication management system for health promotion campaigns. It has:

- Asynchronous message delivery
- Auto mass-message handling & scheduling
- Grouping by participant attributes for message tailoring



MessageSpace is used to monitor participant **exposure** to text messages:

- 138 broadcasts and 31 polls were sent
- 82 program participants received ≥ 1 broadcast
- On average, 6% of participants respond to polls

Results

Changes From Baseline

Anthropometrics	N	Baseline Mean \pm SD	Mean $\Delta \pm$ SD	p value
Weight (lbs)	148	200.35 \pm 58.35	-2.38 \pm 5.87	.00
BMI (kg/m ²)	141	35.56 \pm 9.25	-.39 \pm 1.91	.02
Waist Circumference (in)	146	42.66 \pm 14.59	-1.08 \pm 2.32	.00
Diet				
Fruits & Vegetables (servings per day)	155	1.71 \pm 2.60	.71 \pm 3.84	.02
Physical Activity				
Moderate Minutes (minutes per week)	157	60.86 \pm 92.43	29.01 \pm 111.89	.01

Conclusion

Preliminary results among adult program completers improved body composition, diet, physical activity and health & behavior knowledge.

Text-messaging is a promising communication method for supporting health behavior change interventions for Latino families.

Developing a systematic messaging plan is essential to ensuring each message's timing and content align with the intervention program and also meet the needs of participants.

YLiving4Health: Eating foods high in fiber can help reduce risk of type 2 diabetes & cardiovascular disease. True or False? (Reply w/ #).
001 True
002 False



Implications

Despite availability of this new communication tool, adoption by program implementers is challenging. Development of text messages to support the program requires planning, coordination, and training.