

Formative Evaluation of a Culturally Adapted Spanish Nutrition Education and Obesity Prevention Curriculum for Low-Income Hispanic Adults

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ABSTRACT

Objective: To conduct an exploratory formative evaluation of a culturally adapted nutrition education program for SNAP-eligible Hispanic/Latino adult Georgians

Use of Theory or Research: Nutrition education programs for low-income Hispanics/Latinos must be culturally tailored to be effective.

Target Audience: Spanish-speaking SNAP-eligible adult Georgians

Program Description: "Hablemos de Comida: ¡Por SU Salud!" (HCPSS) is a cultural adaptation of "Food Talk: Better U," an evidence-based program focusing on healthy weight management by University of Georgia SNAP-Ed. A comprehensive needs assessment informed systematic translation and cultural tailoring. The program consists of four 90-minute didactic lessons taught by bilingual paraprofessionals focusing on portion control, limiting added sugar, and making small healthy changes. The program content is interactive and features physical activity using culturally appropriate music and six Hispanic/Latino-inspired, low sodium recipes.

Evaluation Methods: A mixed-method formative evaluation was conducted using self-administered participant surveys (n=9), program administrative data, key informant interviews with program developers and providers (n=6), program participant focus groups (n=3), and in-class observations (n=10) in one pilot county in 2019.

Results: Focus group and key informant interview findings suggested acceptability and cultural appropriateness of HCPSS. Major themes from development and implementation phases emphasized the importance of attending to 1) diversity and cultural appropriateness for target audiences and 2) language, translation, and other interpersonal facilitator skills such as cultural competence and humility. A team-based approach was recommended to address cultural diversity, recruitment barriers, ongoing staff training needs, and other population-specific barriers regarding language, literacy, and mistrust. Administrative data and class observation data suggested high fidelity but the importance of fully bilingual paraprofessionals and additional training for physical activity.

Conclusions and Implications: This study found that the culturally adapted nutrition education and obesity prevention programming targeted to low-income Hispanics/Latinos and strategies to strengthen ongoing development and implementation efforts was feasible.

INTRODUCTION

- The Hispanic/Latinx low-income population face a high burden of health disparities including obesity; lower levels of education; limited access to health care and lower participation in community-based health promotion programs (Flegel, 2016; Velasco-Mondragon et al., 2016).
- Nutrition education is more effective when culturally appropriate (Horner et al., 2015).

Hablemos De Comida: ¡Por SU Salud!

- a Spanish nutrition education and obesity prevention curriculum developed to address the nutritional health disparities of low-income Hispanic Georgians
- A cultural adaption of UGA SNAP-Ed's Food Talk: Better U Curriculum created by a team of diverse experts, including UGA SNAP-Ed staff, UGA faculty, and professional consultants

- Content based on evidence-based research, past programming data and needs assessment findings
- Adaptive translation using native and bilingual translators from multiple countries
- Format used images and visuals that reflect the target audience
- Culturally appropriate recipes created with the help of a Puerto Rican culinary dietitian with feedback from a diverse audience

- Formative Evaluation** is useful for program development or modification of existing programs as it helps to determine if elements are working as intended and allows for changes before full implementation (Stetler et al., 2006).



STUDY OBJECTIVE

- To better understand curriculum acceptability and cultural appropriateness from the perspectives of eligible participants and key stakeholders while identifying potential issues and guide program improvement before statewide roll-out

METHODS

Exploratory Formative Evaluation using Mixed Methods

- Study protocol approved by the University of Georgia IRB

Study Sample:

Key Informants (n=6)	Recruitment: Purposive Sampling Inclusion criteria: Participated in development and implementation of Hablemos de Comida: ¡Por Su Salud!
SNAP-Ed Eligible Participants (n=6)	Recruitment: Convenience Sample Inclusion criteria: ≥ 18 years old, attended at least one class of Hablemos de Comida: ¡Por SU Salud! Pilot: n=6; Focus Group: n=3

Quantitative Components:

Key Informant Socio-demographic Survey	Focus Group Socio-demographic Survey
<ul style="list-style-type: none"> Self-administered online survey through Qualtrics Acculturation question; Language(s) most common at home 	<ul style="list-style-type: none"> Self-administered paper survey translated to Spanish Acculturation questions: Language(s) most common at home Foods most typically eaten at home

Qualitative Components

Key Informant Interviews (November - December 2019)	<ul style="list-style-type: none"> Semi-structured interview guide Includes: program content, challenges, cultural competence Role-specific probes Conducted by researcher
Participant Focus Group (June 2019)	<ul style="list-style-type: none"> Moderator guide developed by researcher and UGA SNAP-Ed team Includes: barriers, recipes, physical activity and program content Professionally translated to Spanish Conducted in Spanish by trained moderator
Class Observation (May 2019)	<ul style="list-style-type: none"> Standard UGA SNAP-Ed Observation forms Conducted by trained, bilingual UGA SNAP-Ed Staff and outside consultants Focuses on fidelity measures, necessary improvements, overall classroom management n=10 (Completed by 2-3 observers/class)

Data Analysis:

- Quantitative:** Descriptive statistics for class observation data and sociodemographic characteristics of participants
- Qualitative:**
 - Verbatim transcription and translation by professional transcription service
 - Constant comparison method using deductive and inductive analysis in English and Spanish by bilingual researcher
- Data triangulation** using program administrative data and class observation to examine the validity of interview data

RESULTS

Characteristics of Study Participants

	Response	Key Stakeholders (n=6)	Pilot Focus Group (n=3)
Gender	Female	6 (100%)	3 (100%)
Ethnicity/Race	Hispanic	3 (50.0%)	3 (100%)
Education	< High school	0 (0%)	2 (66.7%)
Language(s) Spoken at Home	Only English	3 (50.0%)	-
	Only Spanish	-	2 (66.7%)
	Both Spanish and English	3 (50.0%)	1 (33.3%)
Typical Foods at Home	Mixture of Hispanic & American	-	2 (66.7%)
	Did Not Respond	-	1 (33.3%)

Overall Findings

Perceived Strengths

- Providers: training, new recipes, enjoyable to teach and increased reach
- Participants: welcoming environment, culturally appropriate content and recipes, family focus and clear explanations

Major Theme 1: Diversity & Cultural Appropriateness for Target Audience

- Language, food and culture differ among countries
- Impact on all aspects of program development
- Key considerations: Country of origin; Level of acculturation; Demographic makeup of individual class

Major Theme 2: Language, Translation & Other Skillsets

- Translation should be adaptive, inclusive and appropriate with a focus on accuracy, readability and comprehension
- Cultural competency, knowledge and humility are necessary during development and implementation
- Language ability impacts development, program fidelity, rapport and evaluation

LESSONS LEARNED

Key Stakeholders

- Hire educators with cultural competency and linguistic ability
- Adaptively translate all relevant resources and materials
- Develop community-based partnerships to strengthen recruitment efforts
- Further pilot testing in both rural and urban settings
- Develop strategies to strengthen translation, cultural specificity, content development and recipe selection

Participants

- Prefer clear, concise and relevant information
- Needed extra help: relied on Program Assistants for writing-intensive activities
- Registration was challenging for some: Mistrust within Hispanic community must be addressed



IN THEIR OWN WORDS

Key Stakeholders:

On Key Considerations:

"In a cultural adaptation, ... music, food, language, knowledge of community and family interaction, they all come into place. At least for the Hispanic community, those are very strong needs..."

On Recipe Development

"The approach was important. The community is very receptive when they feel trust to try something new, but we are trying to empower them to do behavior changes. We had to first do it with the tools they have and things they know."



Pilot Focus Group:

On Translation:

"That's the most important thing; that you gave those materials to us in our own language. I'm not going to say that we don't understand English; we understand it, but not perfectly like we do our own language."

On Recruitment Barriers:

"The lack of communication that exists... Even if brochures are available, there are some of us that think that this could be detrimental if we receive food stamps or any other benefit... We think that it could affect us negatively."

On A Welcoming Environment

"Thank you all for taking the time. We know you come gladly. This time you take for us, to be with and share, well, it makes us feel very good. Because, the truth is, you pay attention to us; even to our crazy ideas or when we get things right. It's very nice to share with different people."

CONCLUSIONS AND IMPLICATIONS

- Formative evaluation of cultural adaptations can help gather insights and recommendations for community nutrition programs
- Policy/ Research Implications:**
 - Refining validated acculturation scale and developing tools to determine appropriate literacy level and material readability for low-income Hispanic populations
 - Improving cultural competency and diversity within the nutrition and public health profession
 - Expanding public health efforts targeted to the Hispanic population

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