

Physical Activity among Adult Somali Women: The Cultural Adaptation of an Evidence-Based Intervention

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Presenter Disclosures

Kate Murray

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Learning Objectives

- ❖ **Objective 1:** To describe recommended steps for cultural adaptation of evidence-based public health interventions for a new cultural group
- ❖ **Objective 2:** To identify some of the unique barriers and opportunities for physical activity interventions with Somali women living in the United States
- ❖ **Objective 3:** To discuss some of the methodological challenges of piloting and culturally adapting a physical activity intervention for use with a sedentary adult Somali women in the United States

Cultural Adaptation





Changes in Health

- ❖ Nutrition Transition
 - ❖ Rapid onset of chronic diseases
 - ❖ Changes in diet & behavior









When to use Cross-Cultural Adaptation?

Table 1. Possible Scenarios Where Some Form of Cross-Cultural Adaptation is Required

Wording to use a questionnaire in a new population described as follows:	Results in a Change in ...			Adaptation Required	
	Culture	Language	Country of Use	Translation	Cultural Adaptation
A Use in same population. No change in culture, language, or country from source	—	—	—	—	—
B Use in established immigrants in source country	✓	—	—	—	✓
C Use in culture-equivalent, same language	—	✓	—	—	—
D Use in new immigrants, not English-speaking, but in same source country	✓	✓	—	✓	✓
E Use in another country and another language	✓	✓	✓	✓	✓

Adapted from Guillemin et al.⁶

Source: Beaton, Bombardier, Guillemin, & Ferraz (2000). Guidelines for the process of cultural adaptation of self-report measures. *SF36*, 25, 3186-3191.

Cultural Adaptation

1. Information Gathering
2. Preliminary Adaptation Design
3. Preliminary Adaptation Tests
4. Adaptation Refinement

Source: *Barrera & Castro (2006)*. A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science & Practice, 13*, 311-316.

Cultural Adaptation of Interventions

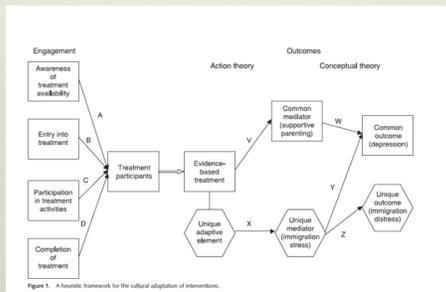


Figure 1. A heuristic framework for the cultural adaptation of interventions.

Source: *Barrera & Castro (2006)*. A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science & Practice, 13*, 311-316.

Cultural Adaptation

Types of Adaptation

- ❖ **Surface:** observable, superficial characteristics (e.g. language, food, locations, clothing)
 - ❖ Revision of tip sheets
 - ❖ Translation
- ❖ **Deep:** cultural, social, historical, environmental and psychological characteristics (e.g. the meaning of health, social norms)
 - ❖ Cultural competence of research team
 - ❖ Critical analysis of sociopolitical circumstances that affect differences in health behaviors and health outcomes

Source: *Rencrow, Baranowski, Abiruwalia, Braithwaite (1999)*. Cultural sensitivity in public health: defined and demystified. *Ethnicity & Disease, 9*, 10-21.

Information Gathering

- ❖ Focus Groups 2009: East African Women
 - ❖ What are your health concerns?
 - ❖ Areas for program development?

Physical Activity

- ❖ Photovoice Project
 - ❖ Safety
 - ❖ Lack of culturally appropriate resources
- ❖ Literature Review



Literature Review

- ❖ Many existing physical activity programs
- ❖ 1 trial with Somali women in New Zealand*
 - ❖ Group-based programs
 - ❖ Sponsored gym memberships
 - ❖ Walking groups at a local high school
- ❖ Growing area of research

* Guerin, Diriye, Corrigan, & Guerin (2003). Physical activity programs for refugee Somali women: Working out in new country. *Women & Health, 38*, 83-99.

Adaptation

- ❖ Practical barriers (e.g. time, money)
- ❖ Cultural/religious barriers
- ❖ Health Literacy as a point for adaptation
 - ❖ Lower literacy associated with worse health status
 - ❖ Tailoring communication can affect outcomes
- ❖ Literacy and Acculturation: larger picture

Sources: 1. Geltman et al (2013). Health literacy, acculturation, and the use of preventive oral health care by Somali refugees living in Massachusetts. *J of Imm and Minority Health, 2*. Schillinger & Davis (2004). A conceptual framework for the relationship between health literacy and health care outcomes: the chronic disease exemplar. In *Understanding Health Literacy: Implications for Medicine and Public Health*.

Ladnaan Program Targets

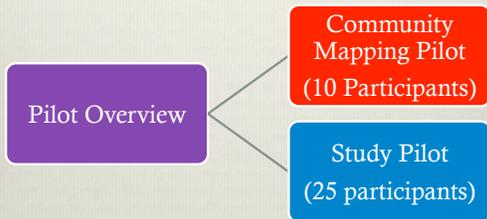
- Somali Women born in Africa
- 18 to 65 years old
- Sedentary
- BMI less than 40

Piloting Recruitment

- ❖ Through partner organization
- ❖ Word of mouth
- ❖ Advisory Committee
- ❖ Community Leaders



Methods



Steps 2/3: Preliminary Adaptation Design & Tests

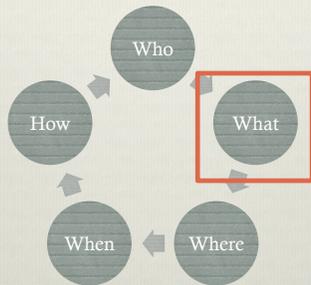
Mapping Procedure

- ❖ Physical Activity Barriers
 - Examples: cost, time, safety, unleashed animals, presence of men
- ❖ Physical Activity Opportunities
 - Examples: free parks, park and recreation centers/programming, YMCAs, venues where children can simultaneously play



NUMBER	NAME	ADDRESS	PHONE NUMBER	THINGS TO KNOW
20	Colma Del Sol Recreation Center	3113 Orange Ave	619.339.1144	Gym, basketball courts, tennis courts, fields, and craft room.

Adaptation



The Intervention

- ❖ Main Components:
 - ❖ Increase moderate intensity physical activity
 - ❖ PA topics: goal setting, moderate intensity exercise, rewards, overcoming barriers, social support, etc.
 - ❖ Wellness topics: stress management, you and your doctor, healthy eating, relaxation, time management, etc.
 - ❖ Emphasis on print-based dissemination of information



Adaptation

Reduce - Simplify - Prioritize

Be Realistic: Make sure your goals are achievable. Unrealistic goals can sometimes lead to frustration and disappointment



Set goals you can meet

- ❖ Sample of key problems: unclear message, long or technical words, complex sentences, no illustrations, print too small, inappropriate for target audience

Health Literacy



Health Literacy

Original Document Means

- ❖ 277 words
- ❖ .62 pictures
- ❖ 5.5 reading level

Revised Document Means

- ❖ 164 words
- ❖ 4.2 pictures
- ❖ 2.9 reading level



Material Content & Delivery

- ❖ Types of exercise
 - ❖ Places for exercise
 - ❖ PA as part of daily living
 - ❖ Focus on family and social networks
- ❖ Group-based format



Next Steps

- ❖ 6-week Open Trial
- ❖ 2013 – 2014 RCT
 - ❖ 100 sedentary adult Somali women
 - ❖ Wait-list control
- ❖ Organizational Intervention
 - ❖ Enhanced community access to culturally appropriate resources
 - ❖ Increased awareness within broader community

Acknowledgements

- ❖ **Mentor Team:** Bess Marcus, Deb Bowen, Simon Marshall, Heidi Ellis
- ❖ **Ladnaan Team:** Amina Sheik Mohamed, Azieb Ermias, Amber Lung, Zana Shirwan
- ❖ **East African Women's Health Advisory Committee:** Godelievre Ndunduyenge, Sahra Abdi, Amy Pan, Elizabeth Abera, Khadiga Mohamed, Nyawech Kailech, Ramla Sahid
- ❖ **Community Partners:** United Women of East Africa Support Team (UWEAST) and Project Concern International (PCI)
- ❖ **Funders:** American Cancer Society (MRS-13-069-01-CPPB), SDSU/UCSD Cancer Center Comprehensive Partnership, California Wellness Foundation

Questions?



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