# Ensuring fit to cultural context to improve health equity

Phoutdavone "Noy" Phimphasone-Brady, PhD Department of Psychiatry University of Colorado, School of Medicine









Colorado Clinical and Translational Sciences Institute (CCTSI)

UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPU

### **Learning Objectives**

• Explain the importance of and need to culturally adapting evidencebased interventions to fit to context, paying attention to target populations' language, culture, and context.

 Describe and integrate appropriate cultural adaptations frameworks for studying the processes and impact of adaptations on intervention adoption, implementation, and effectiveness.







"...dangers of implementing evidence-based interventions without attending to:

the fit of the interventions to the context ...
the populations that are being served,
the different providers who deliver these interventions,
and the diversity of service settings that could benefit from
these interventions."

Baumann A, Cabassa LJ, Stirman SW. Adaptation in dissemination and implementation science. Dissemination and implementation research in health: translating science to practice. 2017 Nov 10;2:286-300.



### **Adaptation**

"modifying interventions to fit provider characteristics, organizational contexts, and service settings (e.g., historical, political, and economic contexts)."







### **Cultural Adaptations**

Integrates multicultural, evidence-based interventions

to psychological treatments to

consider culture, context systematically (historical, economic, ecological, and political influences)





Characteristics	Implementation Science	Cultural Adaptations
Definition	"scientific study of methods to promote the integration of research findings and evidence-based interventions into health care policy and practice"	"systematic modification of EBT to consider language, culture, and context that is compatible with user's cultural patterns, meanings, and values."
Research question examples	How to balance the need to maintain the fidelity of established interventions and customize them to increase relevance, appropriateness, use and uptake?	What elements of the EBTs need to be adapted to enhance their fit, cultural relevance, and social validity to a specific ethno-cultural group or setting?
Emphasis of cultural elements	Organizational level and knowledge exchanges between stakeholders	Provider and client levels
Potential challenges in reducing racial and ethnic disparities in mental health care	Most implementation trials do not document the adaptation process when implementing EBT	Culturally adapted EBTs lack explicit attention to implementation context and implementation strategies

### Why adapt?

Mismatch between intervention content and population and settings

Lack of involvement of racial and ethnic groups in development and testing of interventions

Risk of transporting and promoting assimilation to Western values, norms, and beliefs on others, particularly subordinated groups



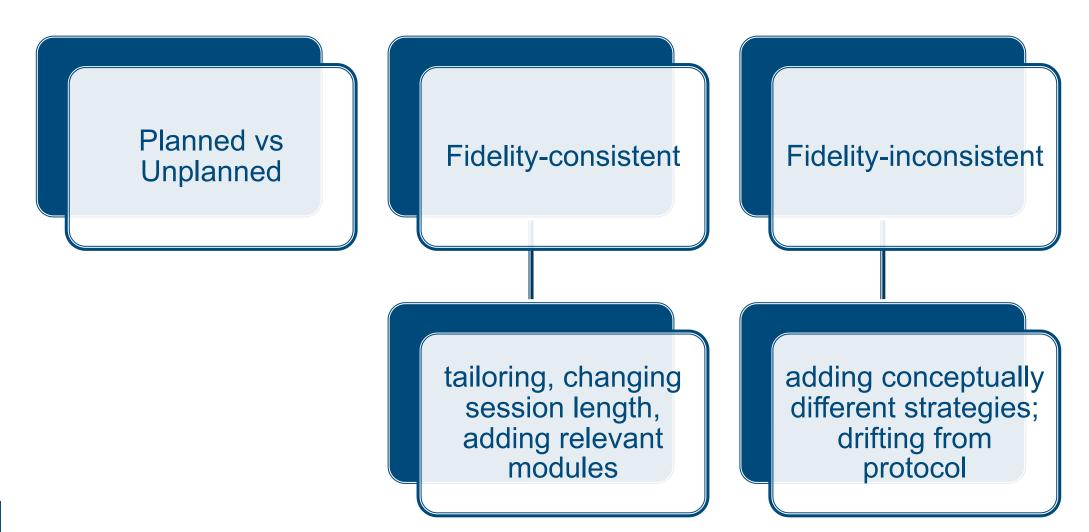








#### **DISTINGUISHING**









### **Study Approaches**



**Participatory methods** 

Stakeholder and Community Engagement



**Human-centered design** 

Co-create of programs, services, and delivery strategies



### Use of adaptation and context frameworks

Consolidated Framework for Implementation Research (CFIR)

Practical, Robust Implementation and Sustainability Model (PRISM)

Framework of modifications and adaptations to evidence-based interventions (FRAME)









### **Study Designs**

- RCTs of adapted intervention to usual care (ideally, pragmatic trials www.precis-2.org)
- Adaptive designs (e.g., Sequential, Multiple Assignment Randomized Trials [SMART])
- Iterative evaluation (e.g., PDSA cycles)
- Multiphase Optimization Strategy (MOST)
- User-Centered Design and rapid prototyping
- Hybrid effectiveness-implementation designs









### **Cultural Adaptation Frameworks**

Cultural Sensitivity Framework Cultural Adaptation Process Model Cultural Adaptation Framework









#### Cultural Sensitivity Framework (Resnicow et al., Ethn Dis, 1999)

Ethnic/cultural characteristics, norms, values, beliefs as well as historical, environmental, and social forces

#### Design, delivery, and evaluation

- Surface: visual appeal, content or messages
- Deep: predictors of problems and contextual influences (sociohistorical, etc.)

Targeted health promotion, materials, and programs







### **Cultural Adaptation Process Model**

(Domenech Rodríguez et al., Voices of color: First-person accounts of ethnic minority therapists, 2004)

Phase 1: Setting the Stage

Collaborate with intervention developer and "cultural adaptation specialist" on fit

CAS determines fit within literature and key community leaders

CAS conducts needs assessment

Phase 2: Initial Adaptation

Tailor intervention a priori

Evaluate measures for theoretical and cultural appropriateness

Observe cultural adaptations in the field and iteratively revise

Phase 3: Adaptation Iterations

Capture adaptations in new version of treatment

Finalize measures and field test

Attend to acceptability, compatibility, appropriateness, and feasibility

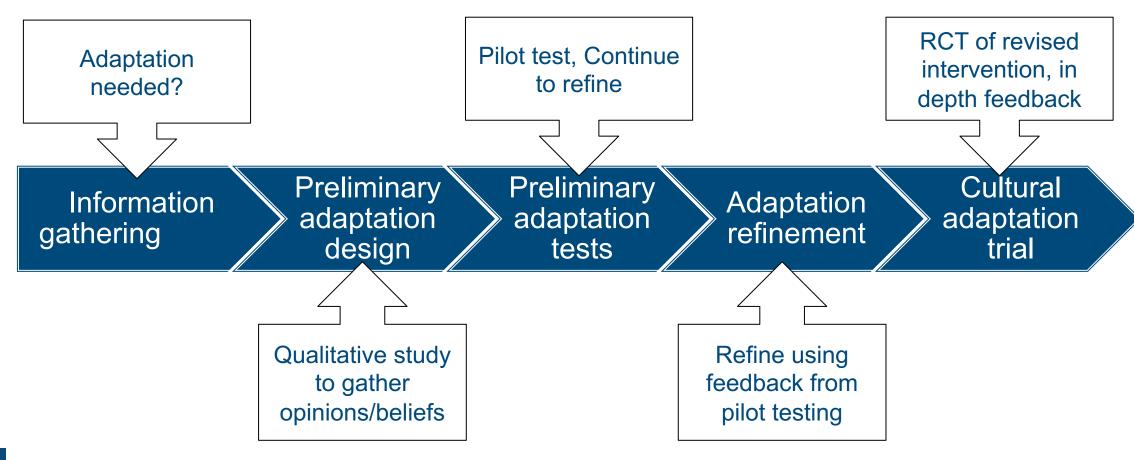






### **Cultural Adaptation Framework**

(Barrera et al, J of Coun Clin Psych, 2013)













### Cultural Sensitivity Framework

### Cultural Adaptation Framework









### Information Gathering: Should we adapt?

- Bulimia Nervosa (BN) and Binge Eating Disorder (BED) are comparable between White and Latina women and both groups want help
- White women were more likely to have utilized psychotherapists, psychiatrists, and medications.
- Latina women were less likely to seek help and if sought help, were less likely to be diagnosed or treated.
  - Seek help from general practitioners for weight concerns
  - Higher degree of importance on cultural meaning of food and eating that intersects with acculturation stress, immigration, limited family and social support







## Information gathering and Preliminary adaptation design: Acceptability and cultural relevance of CBT

- CBT is widely considered the treatment choice for BN and BED
- CBT requires special training, delivered guided self-help (GSH) format
  - Low intensity in which users follow a self-help manual with the assistance of a specialist or nonspecialist (supporter or coach) in clinical and nonclinical settings
- Further explored CBT-GSH to understand the effects of acculturation and language of intervention on treatment acceptability.







### Surface and deep structure of a CBT-based self-help manual



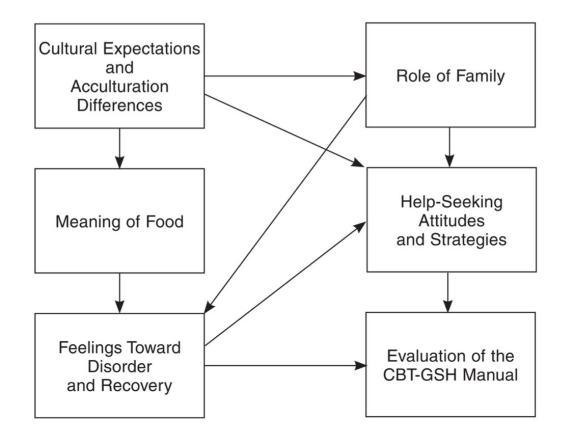
- 1. Getting started: self-monitoring and weekly weighing
- 2. Establishing a regular pattern of eating and stopping vomiting and laxative misuse
- 3. Substituting alternative activities for binge eating
- 4. Practicing problem solving and reviewing progress
- 5. Tackling dieting and other forms of avoidance eating
- 6. Preventing relapse and dealing with other problems







### Preliminary adaptation design: Focus Groups



#### **FIGURE 1. Interrelationships of Themes**

*Note.* CBT-GSH = cognitive behavior therapy guided self-help.







### Preliminary adaptation design: Deep Structure Adaptations

Role play and vignettes to problem solve and cope with lack of family support

Mexican-American food guide on appropriate portions and healthy distribution of American and Latino foods

Encourage and hope instilled through support sessions

Sensitivity raining and supervision Latinas' worldviews, life experiences, and social context





### Preliminary adaptation feasibility test and refinement

- High treatment adherence
  - Reasons for drop out: too much time commitment; program is too burdensome (requires too much work), and interference from (unsupportive) family members
- 35.5% abstinent from binge eating
- 38.7% achieved diagnostic remission from BN, BED, and RBE
  - Symptom reduction in binge eating episodes, distress level, BMI, eating concern, shape and weight concerns, and self-esteem.
- Program rated as somewhat helpful to very helpful
  - Guided support is necessary and needs to be strengthened to increase family and peer support







### **Cultural adaptation trial**

Psychological Services 2019, Vol. 16, No. 3, 504–512

© 2018 American Psychological Association 1541-1559/19/\$12.00 http://dx.doi.org/10.1037/ser0000182

### Randomized Controlled Trial of a Culturally-Adapted Program for Latinas With Binge Eating

Fary M. Cachelin, Virginia Gil-Rivas, Brooke Palmer, Alyssa Vela, and Phoutdavone Phimphasone University of North Carolina–Charlotte Brisa Urquieta de Hernandez and Hazel Tapp Carolinas HealthCare System, Charlotte, North Carolina

- Treatment resulted in reductions in: binge eating frequency, depression, and psychological distress
- 47.6% were abstinent from binge eating at follow-up
- Highly satisfied with program and suggests that dissemination of this program can be a feasible first-step for minimal intervention for Latinas with BED









### **Cross cutting themes**

Conduct a needs assessment with target ethnocultural group, literature review, and seek feedback

Iterative process on designing and testing culturally adapted intervention using multiple methods

Pilot test and seek feedback to refine and improve for subsequent larger trial with target ethnocultural group

Interventions can be adapted improve fit and compatibility and be easily disseminated to improve accessibility and engagement with underserved groups with the ultimate goal to achieve health equity







### Key Cultural Adaptation References:

- Barrera Jr, M., Castro, F. G., Strycker, L. A., & Toobert, D. J. (2013). Cultural adaptations of behavioral health interventions: A progress report. *Journal of consulting and clinical psychology, 81*(2), 196.
- Barrera, M., Jr., Berkel, C., & Castro, F. G. (2017). Directions for the Advancement of Culturally Adapted Preventive Interventions: Local Adaptations, Engagement, and Sustainability. *Prev Sci, 18*(6), 640-648. doi:10.1007/s11121-016-0705-9
- Baumann, A. A., Domenech Rodríguez, M. M., & Parra-Cardona, J. R. Community-based applied research with Latino immigrant families: Informing practice and research according to ethical and social justice principles. Family process. 2011 Jun;50(2):132-48.
- Bernal, G., & Domenech Rodríguez, M. M. (Eds.). (2012). *Cultural adaptations: Tools for evidence-based practice with diverse populations*. American Psychological Association. <a href="https://doi.org/10.1037/13752-000">https://doi.org/10.1037/13752-000</a>
- Cabassa, L. J., & Baumann, A. A. (2013). A two-way street: bridging implementation science and cultural adaptations of mental health treatments. *Implement Sci, 8*(1), 90. doi:10.1186/1748-5908-8-90
- Domenech Rodríguez, M., Baumann, A., & Swartz, A. (2008). Cultural adaptation of an empirically supported intervention: From theory to practice in a Latino/a community context. *Psychology Faculty Publications*.
- Domenech-Rodríguez M, Wieling E. Developing culturally appropriate, evidence-based treatments for interventions with ethnic minority populations. Voices of color: First person accounts of ethnic minority therapists. 2004:313-33.
- Resnicow, K., Baranowski, T., Ahluwalia, J. S., & Braithwaite, R. L. Cultural sensitivity in public health: defined and demystified. Ethn Dis. 1999;9(1):10-21.









# Ensuring fit to cultural context to improve health equity

Phoutdavone "Noy" Phimphasone-Brady, PhD Department of Psychiatry University of Colorado, School of Medicine

noy.phimphasone-brady@cuanschutz.edu









Colorado Clinical and Translational Sciences Institute (CCTSI)

UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPU