**Annotated Bibliography**

**Methodological Resources for Translating Evidence-Based Behavioral Interventions (EBI)
to Reach Diverse Populations**

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A critical approach in addressing health disparities is to implement evidence-based interventions (EBI), particularly behavioral interventions that can improve health, into community settings to reach disparity populations. Although effective EBIs exist, they are not being implemented broadly, especially in vulnerable communities experiencing disparities. One reason is that there are few conceptual models of the translation processes that apply to the health disparities field. Most existing models assume that translating one EBI with minor adaptations suffices, and communities are seldom involved in the process. In fact, substantial adaptations to any EBI may be necessary to accommodate differences between the original EBI context and disparity communities, e.g., in populations reached, community settings, and available resources.

This annotated bibliography includes key publications that provide guidelines and models for translation and adaptation in disparity communities. We list alphabetically publications in two categories:

I. Conceptual frameworks of the processes of translation and implementation applicable to health disparity communities (this does not include [our transcreation model](https://cadc.ucsf.edu/transcreation) described on our home page).

II. Examples of the adaptation and translation process

1. **Conceptual Frameworks of Methods of Translation and Implementation Appropriate for Diverse Populations**

Castro FG, Barrera M Jr, Holleran Steiker LK. Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology*. 2010;6:213-39. [PMCID: PMC4262835](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4262835/)

The authors provide relevant definitions, describe challenges and issues, and give examples of cultural adaptation frameworks and methods. They explore emerging multistep frameworks as a guide to developing culturally adapted EBIs. Table 2 provides a useful summary and comparison of three adaptation process models with the specific steps of each model. They also review evidence on the effectiveness of EBIs that have been culturally adapted and suggest important areas for future research, including identification of cultural mediators and moderators of program effectiveness.

Gonzales NA. Expanding the cultural adaptation framework for population-level impact. *Prevention Science,* 2017;18(6):689-93. PMCID: [PMC5572077](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5572077/)

Attention to cultural diversity and cultural adaptation of evidence-based interventions (EBIs) has been a longstanding priority in prevention science. However, EBIs for diverse populations present several challenges for broad dissemination and population impact. This commentary summarizes five papers in this special issue that focus on some of these challenges and offer new ways of thinking and recommendations for the next generation of translation research. It underscores three broad recommendations: 1) the need for a more expanded conceptualization and empirical understanding of the core tension between fidelity and adaptation, 2) greater focus on the systems of care that deliver EBIs to culturally diverse populations; and 3) greater flexibility in strategies to adapt and evaluate interventions within settings that serve diverse populations. By offering exemplars and suggestions to address these challenges, these papers help to realign research on cultural adaptation with its ultimate goal of reducing health disparities. However, other fundamental challenges remain unaddressed, including the need to reduce inequalities that exist in the health, education, social service, and justice systems that will ultimately support broad diffusion of EBIs for diverse populations.

1. **Examples of Processes of Translation and Adaptation of Evidence-Based Interventions**

[Barrera M Jr](http://www.ncbi.nlm.nih.gov/pubmed/?term=Barrera%20M%20Jr%5BAuthor%5D&cauthor=true&cauthor_uid=22289132), [Castro FG](http://www.ncbi.nlm.nih.gov/pubmed/?term=Castro%20FG%5BAuthor%5D&cauthor=true&cauthor_uid=22289132), [Strycker LA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Strycker%20LA%5BAuthor%5D&cauthor=true&cauthor_uid=22289132), [Toobert DJ](http://www.ncbi.nlm.nih.gov/pubmed/?term=Toobert%20DJ%5BAuthor%5D&cauthor=true&cauthor_uid=22289132). Cultural adaptations of behavioral health interventions: a progress report.  [Jour*nal of Consulting and Clinical Psychology,*](http://www.ncbi.nlm.nih.gov/pubmed/22289132) 2013 Apr;81(2):196-205. PMCID: [PMC3965302](https://www.ncbi.nlm.nih.gov/pmc/articles/pmid/22289132/)

The goals of the article are to (a) describe consensus on the stages involved in developing cultural adaptations, (b) identify common elements in cultural adaptations, (c) examine evidence on the effectiveness of culturally enhanced interventions for various health conditions, and (d) pose questions for future research. The authors reviewed influential literature from the past decade. Results suggest that cultural adaptation can be organized into five stages: information gathering, preliminary design, preliminary testing, refinement, and final trial. With few exceptions, reviews of several health conditions (e.g., diabetes) concluded that culturally enhanced interventions are more effective in improving health outcomes than usual care or other control conditions. The authors conclude that progress has been made in establishing methods for conducting cultural adaptations and providing evidence of their effectiveness.

Burgio LD, Collins IB, Schmid B, Wharton T, McCallum D, Decoster J. Translating the REACH caregiver intervention for use by area agency on aging personnel: the REACH OUT program. *The Gerontologist,* 2009;49(1):103-16. PMCID: [PMC3695600.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3695600/)

This article describes in detail the processes used to translate the evidence-based Resources for Enhancing Alzheimer's Caregiver Health (REACH) II intervention for use in four Area Agencies on Aging (AAAs). A partnership between the Alabama Department of Senior Services and the University of Alabama adapted the REACH II intervention used in the clinical trial for feasible use in a social service agency. The authors describe the processes of adaptation, including an evaluation of the outcomes of the condensed intervention, which was called REACH OUT.

Delgadillo AT, Grossman M, Santoyo-Olsson J, Gallegos-Jackson E, Kanaya AM, and Stewart AL. Description of an academic community partnership lifestyle program for lower-income, minority adults at risk for diabetes. *The Diabetes Educator*, 2010, Jul-Aug;36(4):640-60. PMCID: [PMC3771540](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC3771540).

This article describes strategies to develop a lifestyle intervention for delivery in a community setting. The project was a partnership consisting of researchers at a major university and public health professionals at a local health department. The *Live Well, Be Well* program was adapted from several interventions with demonstrated efficacy and delivered in Spanish and English by health department staff. It was designed to meet the needs of lower income, minority, and low-literacy adults at risk for diabetes. Individually tailored and nonprescriptive, it utilized existing health department infrastructure, focused on telephone counseling, and drew from existing culturally appropriate, low-literacy materials. It was delivered in local, community-based facilities. The program provides a unique translational model for implementing diabetes risk reduction programs for underserved populations.

Lorig KR, Ritter PL, Jacquez A. Outcomes of border health Spanish/English chronic disease self-management programs. *The Diabetes Educator*, 2005;31(3):401-9. PMID:[15919640](https://www.ncbi.nlm.nih.gov/pubmed/?term=15919640)

This article describes the dissemination and evaluation of the community-based Chronic Disease Self-management Program and the Spanish-language version (Tomando Control de Su Salud) as delivered in Texas/New Mexico/Mexico border towns. It details the cultural adaptations made in the Spanish language version based on formative research and the delivery of the program by the El Paso Diabetes Association to 445 persons with chronic illness. The program was effective with significant improvements in behaviors, health status and self-efficacy.

Nápoles AM, Santoyo-Olsson J, Ortiz C, Gregorich S, Lee HE, Duron Y, Graves K, Luce JA, McGuire P, Díaz-Méndez M, Stewart AL. Randomized controlled trial of Nuevo Amanecer: a peer-delivered stress management intervention for Spanish-speaking Latinas with breast cancer. *Clinical Trials*, 2014; Apr;11(2):230-8. PMCID: [PMC3972263](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC3972263)

This paper describes community-based participatory research methods used to develop and implement a culturally tailored, peer-delivered cognitive-behavioral stress management intervention for low-income Spanish-speaking Latinas with breast cancer. It describes the randomized controlled trial study and unique considerations in implementing the trial to test the program in community settings. The authors delineate several methodological phases used to develop and implement the Nuevo Amanecer program and trial, emphasizing community engagement processes. In particular, they summarize several “lessons learned.” For example, including community-based organizations and cancer survivors as research partners and hiring recruiters and interventionists from the community were critical to successful implementation in community settings. Also, facilitating and maintaining excellent communication among community partners was imperative to troubleshoot implementation issues. Engaging community members in the design and implementation of community-based programs and trials enhances cultural appropriateness and congruence with the community context.

Nápoles-Springer AM, Ortiz C, O'Brien H, Diaz-Mendez M. Developing a culturally competent peer support intervention for Spanish-speaking Latinas with breast cancer. *Journal of Immigrant and Minority Health*, 2009;11(4):268-80. PMCID: [PMC3832434](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC3832434).

This paper provides an example of how formative research can be used to adapt evidence-based interventions for minority populations. The authors obtained input from Latina breast cancer survivors, breast cancer patients referred to psychosocial services, and advocates for Latinos with cancer to identify barriers to, benefits of, and useful components of an effective peer support counselor intervention for Spanish-speaking Latinas recently diagnosed with breast cancer. Results indicated that interventions should begin soon after diagnosis, build self-care skills, be culturally competent and emotionally supportive, provide language appropriate cancer information, encourage self-expression, and address lack of access to and knowledge of services.

Stewart AL, Gillis D, Grossman M, Castrillo M, Pruitt L, McLellan B, and Sperber N. Diffusing a research-based physical activity promotion program for seniors into diverse communities: CHAMPS III. *Preventing Chronic Disease*, 2006 Apr;3(2) A51. PMCID: [PMC1563966](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC1563966).

This paper describes the processes involved in diffusing an evidence-based intervention (CHAMPS II), to reach lower-income and minority (primarily Hispanic or Latino and African American) seniors. The evaluation was based on the logic model approach recommended by the Centers for Disease Control and Prevention. Through an academic-community partnership, university staff worked with each organization to adapt the program to be as appealing and effective as possible, enable their staff and volunteers to provide the program, increase participants' physical activity, and leave sustainable programs in place. The adapted and implemented programs differed substantially from the original program and among organizations. Evaluation revealed numerous challenges and some unexpected community-level benefits. The overarching challenge was to retain original program features within each organization's resources yet be sustainable.

Stewart AL, Grossman M, Bera N, Gillis DE, Sperber N, Castrillo M, Pruitt L, McLellan B, Milk M, Clayton K, and Cassady D. Multilevel perspectives on diffusing a physical activity promotion program to reach diverse older adults. *Journal of Aging and Physical Activity,* 2006;14(3):270-287. PMID:[17090805](Stewart%20et%20al%20%20Multilevel%20perspectives%202006.pdf)

Because health disparity communities often have locally developed programs (best practices) designed specifically for vulnerable individuals, formative research in those communities is warranted. The authors describe a community-based approach to determine attitudes, resources, needs, and barriers to physical activity and the potential diffusion of a physical activity promotion program to reach minority and lower-income older adults. Formative research using focus groups and individual interviews from multiple sectors: community members, task force and coalition members, administrators, service implementers, health care providers, and physical activity instructors. Using qualitative methods, 47 transcripts (N = 197) were analyzed. Most sectors identified needs for culturally diverse resources, promotion of existing resources, demonstration of future cost savings, and culturally tailored, proactive outreach. The program was viewed favorably, especially if integrated into existing resources. Linking sectors to connect resources and expertise was considered essential. Complexities of such large-scale collaborations were identified. Methods and results may guide communities interested in diffusing health promotion interventions.

Teri L, McKenzie G, Logsdon RG, McCurry SM, Bollin S. Mead J. Menne H. Translation of two evidence-based programs for training families to improve care of persons with dementia. *The Gerontologist*, 2012;52(4):452-9. PMCID:[PMC3391381](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC3391381)

The Ohio Department of Aging (in collaboration with the Alzheimer's Association Chapters in Ohio) and the Oregon Department of Health Services (in partnership with Area Agencies on Aging and the Oregon Chapter of the Alzheimer's Association) translated two programs - Reducing Disability in Alzheimer's Disease and STAR-Community Consultants (STAR-C) - for implementation by their staff. Both programs are designed to improve care, enhance life quality, and reduce behavioral problems of persons with dementia and have demonstrated efficacy via randomized controlled trials. This article addresses the developmental and ongoing challenges encountered in translating these programs to inform other community-based organizations considering the translation of evidence-based programs and to assist researchers in making their work more germane to their community colleagues.

[McCurry SM](http://www.ncbi.nlm.nih.gov/pubmed/?term=McCurry%20SM%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [Logsdon RG](http://www.ncbi.nlm.nih.gov/pubmed/?term=Logsdon%20RG%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [Mead J](http://www.ncbi.nlm.nih.gov/pubmed/?term=Mead%20J%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [Pike KC](http://www.ncbi.nlm.nih.gov/pubmed/?term=Pike%20KC%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [La Fazia DM](http://www.ncbi.nlm.nih.gov/pubmed/?term=La%20Fazia%20DM%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [Stevens L](http://www.ncbi.nlm.nih.gov/pubmed/?term=Stevens%20L%5BAuthor%5D&cauthor=true&cauthor_uid=25873454), [Teri L](http://www.ncbi.nlm.nih.gov/pubmed/?term=Teri%20L%5BAuthor%5D&cauthor=true&cauthor_uid=25873454). Adopting evidence-based caregiver training programs in the real world: Outcomes and lessons learned from the STAR-C Oregon Translation Study. [*Journal of Applied Gerontology*,](http://www.ncbi.nlm.nih.gov/pubmed/25873454) 2017 May;36(5):519-536. PMID:[25873454](https://www.ncbi.nlm.nih.gov/pubmed/?term=25873454)

The authors describe the translation and evaluation of STAR-Community Consultants program (STAR-C), an evidence-based dementia caregiver training program, within the Oregon Department of Human Services. Staff from two regional Area Agencies on Aging (AAAs) were trained to implement all aspects of STAR-C, including screening, recruitment of caregiver/care-receiver dyads, and treatment delivery. Mailed assessments of caregiver depression, burden, and care-receiver mood, behavior, and quality of life were collected at pre-treatment, post-treatment, and 6-month follow-up. One hundred fifty-one dyads entered the program; 96 completed the 8-week intervention. Significant positive post-treatment effects were obtained for caregiver depression, burden, and reactivity to behavior problems, and care-receiver depression and quality of life. At 6-month follow-up, improvements in caregiver reactivity and care-receiver depression were maintained. Caregivers reported high levels of satisfaction with the program. STAR-C was successfully and effectively implemented by participating AAAs. Recommendations for replication, including training, recruitment, and assessment procedures are provided.