

Cultural Adaptations of Occupational Therapy Interventions to Improve Access and Use.

Roseann Schaaf, PhD, OTR/L, FAOTA¹, Lady Rios-Vega OTD, OTR/L, CASI¹, Rachel Dumont MS, OTR/L¹, Taylor Sivori OTD, OTR/L¹

¹Thomas Jefferson University, Philadelphia PA, United States.

Introduction/Background

- Autism affects 1 in 31 children in the U.S. across all racial and ethnic backgrounds¹
- Children from culturally diverse backgrounds experience delays in accessing occupational therapy, contributing to developmental delays, lower quality of life, and financial strain²
- Evidence based occupational therapy interventions are based largely on White samples^{3,4}
- Minoritized individuals as well as those living in rural or geographically underserved areas face significant challenges accessing evidence-based services^{5,6}

Purpose

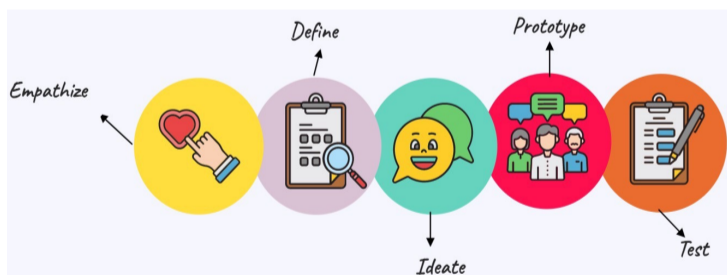
To describe the processes and approaches used to adapt the occupational therapy intervention, Ayres Sensory Integration (OT-ASI)[®] for autistic children to improve accessibility, acceptability and utilization for:

- Black and African American Autistic Populations
- Hispanic and Latin American Autistic populations.
- Telehealth Delivery

Methods

Community Engagement guided all phases of the cultural and telehealth adaptations. Diverse stakeholders, including autistic adults, caregivers, clinicians, and community representatives were actively engaged to identify needs, inform adaptation decisions, and refine content. Multiple engagement methods were used to systematically collect stakeholder input, including:

Design Thinking (DT) is a collaborative approach that aims to understand needs and develop effective solutions.



Empathize: understand lived experiences. **Define:** clarify the problem and goals, **Ideate:** brainstorm potential solutions, **Prototype:** craft solutions, and **Test:** gather feedback to refine ideas.

Focus Groups (FG) Approach where a facilitator leads structured group discussions to explore shared experiences, perspectives, and attitudes.



Interviews: individual interviews to capture detailed stakeholder perspectives.

Participants (n=150) for all studies

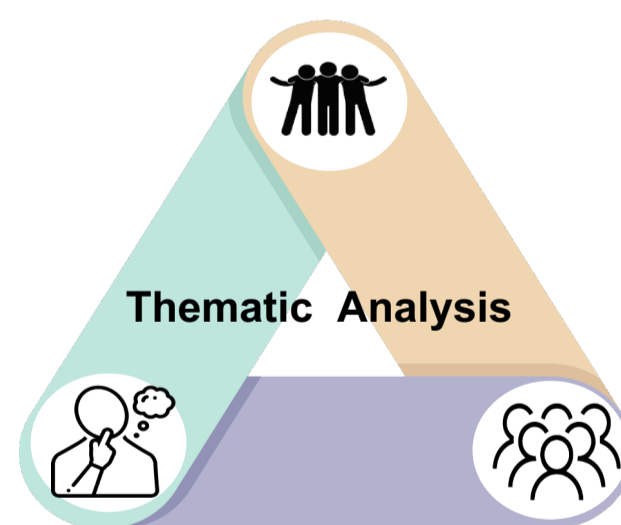
Participant Categories	
Autistic Adults	Educator/Teachers
Parent/Caregivers	Autism Experts
OT Practitioners	Cultural Experts

Methods

Data from Engagement Methods was used to create intervention adaptations. Adaptations followed evidence-based frameworks to support relevance, transparency, and rigor.

Framework	Overview	Key Areas / Domains	Project Used
Ecological Validity Model (EVM) (Bernal & Sáez-Santiago, 2006)	Ensures interventions align with the cultural values, context, and lived experiences of the target population.	Language; Persons; Metaphors; Content; Concepts; Goals; Methods; Context	ASI [®] Hispanic/Latino adaptation ASI [®] Black and African American adaptation
Framework for Reporting Adaptations and Modifications –Expanded (FRAME) (Stirman et al., 2019)	Provides a structured method for documenting how and why adaptations are made while maintaining fidelity.	What; Why; Who; When; How; Level; Context; Fidelity	ASI [®] Hispanic/Latino adaptation
Cultural Adaptation Process (CAP) (Domenech Rodríguez et al., 2011)	Describes an iterative, stakeholder-engaged process for adapting evidence-based interventions.	Preparation & community engagement; Iterative refinement	ASI [®] Black and African American adaptation ASI [®] telehealth adaptation

Data Analysis



Qualitative Analysis

- Thematic analysis were completed following Kiger & Varpio, 2020; Castleberry & Nolen, 2018; Saldaña, 2016 for cultural adaptations.
- Trustworthiness procedures (Nowell et al., 2017) were followed including credibility, dependability, confirmability and inter-rater reliability for H/L adaptation.

Quantitative Analysis

- Survey data was also used for the telehealth study on the cultural adaptations.
- Hispanic and Latino surveys are in progress to assess acceptability, feasibility, and appropriateness of the cultural adaptation.
- Cohen's Kappa was used for the H/L analysis to assess inter-rater reliability

Cultural Adaptations of Occupational Therapy Interventions to Improve Access and Use.

Roseann Schaaf, PhD, OTR/L, FAOTA¹, Lady Rios-Vega OTD, OTR/L, CASI¹, Rachel Dumont MS, OTR/L¹, Taylor Sivori OTD, OTR/L¹

¹Thomas Jefferson University, Philadelphia PA, United States.

Results

Themes Identified Across Cultural and Telehealth Studies Guiding OT-ASI Adaptations

Study Type
BAA: Black and African American Cultural Adaptation Study
H/L: Hispanic and Latino Adaptation Study
TH: Telehealth Adaptation Study

SHARED ACROSS ALL THREE (BAA + H/L+ TH)

- Cultural humility needs (values, traditions, norms)
- Access to additional resources
- Structural & systemic barriers
- Improved therapeutic & client-centered services

SHARED ACROSS BAA + H/L

- Autism education and knowledge translation
- Challenges in obtaining an autism diagnosis
- Parent/caregiver preferences and support building
- Communication and collaboration for therapeutic relationships

H/L ONLY

- Familiarity and cultural guidance for ASI®
- Stakeholder-driven solutions
- Quality and impact of therapy services

BAA ONLY

- Awareness of occupational therapy scope
- scheduling

TH ONLY

- Access to appropriate technology and support for its use

Survey Results on Telehealth Adaptation Ratings with OT Clinicians

OT Clinicians (N=6)

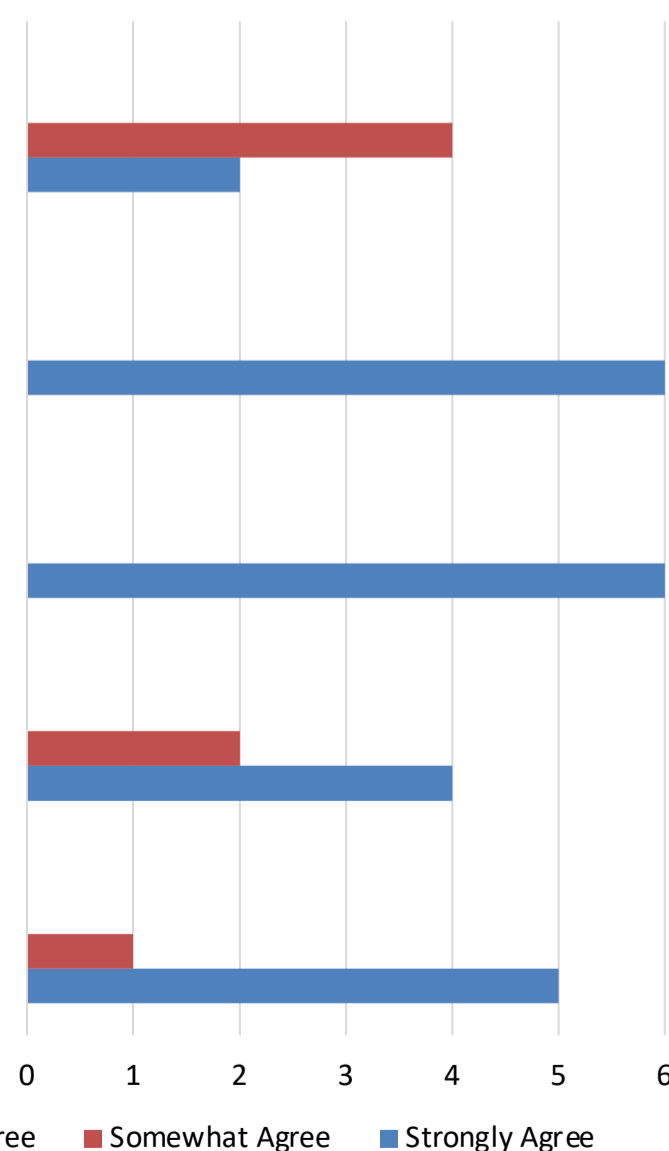
The intervention is feasible to implement through telehealth/remote delivery

The materials provide useful guidance for developing intervention activities that can be delivered by telehealth

The manual is a useful tool to help you understand the links between sensory factors and the child's participation

The manual clearly and accurately describes the ASI approach

The manual is easy to follow



Summary

This project describes a systematic, community-engaged process to culturally adapt an occupational therapy intervention using stakeholder engagement. Adaptations were guided by qualitative and quantitative data and evidence-based frameworks, the Ecological Validity Model (EVM), FRAME, and the Cultural Adaptation Process (CAP), to ensure cultural relevance, transparency, and fidelity. Findings show that culturally responsive adaptations can be systematically developed while maintaining intervention integrity.

Implications for Practice

- Cultural adaptation should be intentional and systematic
- Struframeworks (e.g., EVM, FRAME, CAP) support meaningful adaptations without compromising fidelity to evidence-based interventions.
- Stakeholder engagement is fundamental: Actively involving autistic individuals, families, clinicians, and community partners enhances relevance, acceptability, and feasibility of occupational therapy adaptations and overall services.
- Culturally responsive OT may reduce access disparities: Adapted OT-ASI has the potential to improve utilization among racially, ethnically, and geographically underserved communities.
- Telehealth requires cultural consideration: Culturally informed adaptations are essential to ensure telehealth delivery is accessible, appropriate, and effective.
- Iterative refinement strengthens practice: Ongoing feedback and evaluation support accessible, responsive, equitable, and sustainable occupational therapy service delivery.

References

1. Bernal, G., & Sáez-Santiago, E. (2006). Culturally centered psychosocial interventions. In M. J. Barrera Jr., G. Castro, & L. K. Steiker (Eds.), *Community psychology: Linking individuals and communities* (pp. 67–82). American Psychological Association.
2. Cottrell, E. K., Whitlock, E. P., Kato, E., Uhl, S., Belinson, S., Chang, C., & Guise, J. M. (2021). Defining meaningful stakeholder engagement in patient-centered outcomes research. *Journal of General Internal Medicine*, 36(2), 533–540. <https://doi.org/10.1007/s11606-020-06160-5>
3. Domenech Rodríguez, M. M., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence-based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology*, 47(3–4), 170–186. <https://doi.org/10.1007/s10464-010-9374-2>
4. Smith, L. E., Greenberg, J. S., & Mailick, M. R. (2020). Disparities in service use among children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50(3), 912–926. <https://doi.org/10.1007/s10803-019-04230-75>
5. Stirman, S. W., Baumann, A. A., & Miller, C. J. (2019). The FRAME: An expanded framework for reporting adaptations and modifications to evidence-based interventions. *Implementation Science*, 14(1), Article 58. <https://doi.org/10.1186/s13012-019-0898-y>
6. Weiner, B. J., Lewis, C. C., Stanick, C., Powell, B. J., Dorsey, C. N., Clary, A. S., Boynton, M. H., & Halko, H. (2017). Psychometric assessment of three newly developed implementation outcome measures. *Implementation Science*, 12, Article 108. <https://doi.org/10.1186/s13012-017-0635-3>