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Cultural Adaptation of an Evidence Based Intervention: From Theory to Practice in a Latino/a Community Context

Melanie M. Domenech Rodríguez · Ana A. Baumann · Audrey L. Schwartz

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Abstract The cultural tailoring of interventions to reach underserved groups has moved from descriptive and prescriptive models to their application with existing evidence based treatments. To date few published examples illustrate the process of cultural adaptation. The current paper documents the adaptation of an evidence based parent training intervention, Parent Management Training—Oregon Model (PMTO^{TM}), for Spanish-speaking Latino parents using both process (Domenech Rodríguez and Wieling in Voices of color: first-person accounts of ethnic minority therapists, Sage, Thousand Oaks, 2004) and content (Bernal et al. in J Abnorm Child Psychol 23:67–82, 1995) models. The adaptation took place in stages: a pilot study to ensure feasibility, focus groups to establish appropriate format and goals, and a test of the intervention. Throughout the process the treatment manual was treated as a living document. Changes were applied and documented as the team developed improvements for the adaptation. The present discussion details both process adaptations, (e.g., engaging the treatment developer, community leaders, and parents, and decentering the manual), and content adaptations, (e.g., shaping the appropriateness of language, persons, metaphors, concepts, contexts, methods, and goals). The current research provides support for the idea that cultural adaptations can improve service delivery to diverse groups and can be conducted systematically with documentation for replication purposes. Suggestions for improving the empirical measurement and documentation of the adaptation process are included.

M. M. Domenech Rodríguez (✉) · A. L. Schwartz
Department of Psychology, Utah State University,
2810 Old Main Hill, Logan, UT 84322-2810, USA
e-mail: Melanie.Domenech@usu.edu

A. A. Baumann
Center for Latino Family Research, George Warren Brown School of Social Work, Washington University in St. Louis,
Campus Box 1196, One Brookings Drive, St. Louis,
MO 63130-4899, USA

Introduction

Reaching ethnic minorities and other underserved groups in health interventions has been a priority for institutions (e.g., Department of Health and Human Services 2001) and practitioners alike for decades. Exactly *how* to reach underserved individuals and groups has been less clear. Some program developers have designed culturally grounded programs (e.g., Strong African American Families program, McBride Murry et al. 2007), while others have advocated to retain evidence based treatments without modification for application with ethnically and culturally diverse samples (Elliot and Mihalic 2004; O'Donohue and Benuto 2010). The vocal majority in this debate advocates for culturally adapting empirically based treatments to fit the relevant community (Bernal 2006; Bernal et al. 2009; Borrego et al. 2006; Cardemil 2010; Domenech-Rodriguez and Wieling 2004; McCabe et al. 2005; Roosa et al. 2002). The debate has been recently augmented by meta-analytic research findings that show that culturally adapted treatments have a greater effect than traditional treatments (d = .46), that more cultural adaptations results in better treatment outcomes, and that most successful implementations were conducted with single minority ethnic groups (Smith et al. 2010).

Although theoretical models exist to provide guidance on where and how to adapt, few published examples illustrate how adaptations using these models might appear in a given intervention (Reese and Vera 2007; see Matos

et al. 2006 and McCabe et al. 2005 for examples). The current paper presents an example of this using an adaptation for Spanish-speaking Latinos in a small western community with the Parent Management Training—Oregon (PMTO™) program. The resulting manual, *Criando con Amor: Promoviendo Armoniá y Superación* (CAPAS), is a product of (1) theoretically-driven and systematic adaptations to the intervention (Bernal et al. 1995), and (2) the process of intervention delivery and evaluation of that delivery (Domenech-Rodriguez and Wieling 2004).

The Oregon Model of Parent Management Training

PMTO was selected for the present research because of its underlying theory, research, and intervention practices. It was the principal investigator's (PI, first author) professional opinion that PMTO provided a good fit for addressing the needs of Spanish-speaking Latino parents who wanted support with their parenting. PMTO is based on Social Interaction Learning (SIL) theory, which provides a broad perspective for resulting child behavior that begins within contexts that set the stage for parenting practices, which in turn directly impact child behavioral outcomes (Forgatch and Patterson 2010). This ecological model conceptualizes parenting practices within broad contexts that include the unique stressors confronting Latinos (e.g., immigration, discrimination, language adjustment). Simply stated, positive parenting practices promote healthy child adjustment while coercive parenting practices increase the risk for negative outcomes. PMTO programs have sustained a strong grounding on direct observation of family interactions and intervention practice, which serves as a strength for adapting the model with Latino families. Child outcomes can be immediate (e.g., reduced non-compliance at home), mid-range (e.g., improved behavior and performance at school), and long-term (e.g., delinquency and police arrests in the community). What is critical here is the focus on reducing coercive processes within the family and increasing positive approaches to parenting. The core parenting dimensions invite adaptations that sustain mechanisms that promote program efficacy. Such adaptations can include process changes (e.g., presentation, language, metaphor, delivery). The SIL model focuses on the reciprocal interaction between parents and children. The continual observation and testing leads to growing knowledge about a specific set of problematic child and parent behaviors.

SIL theory postulates that child adjustment problems begin with overt small negative behaviors (e.g., noncompliance, shouting, tantrums). Some children develop a path characterized with covert behaviors (e.g., lying, stealing, truancy). The combination of overt and covert problems can lead to serious negative outcomes such as delinquency and police arrests (Forgatch et al. 2009). Blame is not directed toward individuals in the family; rather the interaction between parents and children is examined to reveal areas of vulnerability so that interventions can be delivered to strengthen weaknesses. Five core parenting practices are identified as mechanisms for child outcomes: skills building, limit setting, positive involvement, problem solving, and monitoring.

Substantial research has evaluated the theoretical model and supports the intervention's efficacy for producing favorable child outcomes and has identified parenting practices as the mechanisms of change. Experiments have been conducted over three decades that support the coercion cycle as a predictor of short- and long-term outcomes. Randomized controlled trials using Intent-to-Treat (ITT) analysis have been conducted with focal children who range in age from toddlerhood to emerging adulthood, with programs conducted in varied settings (e.g., schools, clinics), using multiple formats (e.g., individual family, group), across problem areas (e.g., substance use, delinquency) and levels of need (e.g., prevention, clinical samples). PMTO implementations have been carried out at in ivory-tower settings with highly specialized samples (e.g., recently separated single mothers, recently married stepfather families), clinical settings statewide (e.g., Michigan), urban community levels (e.g., Detroit-Wayne County), nationwide (i.e., Norway), and in diverse international samples in Iceland, the Netherlands, and México. Short-term and long-term outcomes are strong. Relevant to the present study, therapeutic processes during intervention have been carefully researched (Patterson and Chamberlain 1988; Patterson and Forgatch 1985; Stoolmiller et al. 1993). For example, standard clinical processes (e.g., forming a collaborative working relationship between interventionist and parent before addressing the real struggle; refraining from combining teaching and confrontation), have been found to be relevant to treatment outcomes. For a recent review of these findings, see Forgatch and Patterson (2010).

PMTO manuals provide agenda, materials, key principles, and examples of scripts that bring theoretical concepts to life. The adaptations for the present research were based on the wealth of materials obtained from various PMTO manuals. PMTO manuals include *Parenting through Change* (PTC; Forgatch 1994), *Marriage and Parenting in Stepfamilies* (MAPS; Forgatch and Rains 1997), and *Currículo de Paternidad Positiva* (Bank 2002). These manuals were designed for use with distinct samples but have tremendous overlap in content and are perhaps best conceptualized as belonging to the family of PMTO interventions. CAPAS is another addition to the PMTO family. The CAPAS adaptations, designed to reach a Spanish-speaking Latino population in Utah, were

informed by existing literature, consultation with experts, as well as two data sources: pilot data to test the feasibility of the data collection procedures (50 families) and focus group data (10 focus groups, 41 parents). The focus group component of the study obtained information from targeted community members about their parenting beliefs, practices, and barriers to parenting. The resulting CAPAS manualized intervention was tested in a rural Western community through 10 parent groups that ranged in size from 4 to 15 parents.

Description of this cultural adaptation process has two overarching goals. The first is to provide a guide for researchers and practitioners working with Latino families. The second is to describe a method for tailoring evidence based treatments to the specific needs of Latinos or other ethnic minority groups. An additional aim is to add transparency to the process of adapting efficacious programs for use with diverse populations enabling the tailoring process itself to undergo the scrutiny that is foundational for scientific progress.

Latinos

Latinos[1] now are the largest minority group in the United States and comprise 15% of the country's population (US Census Bureau 2006, 2008). Although the growth of the Latino population is due in large part to new births, immigration has contributed substantially as well, with a majority of foreign-born Latinos arriving after 1990 (US Census Bureau 2007). The result is that the Latino population in the US has a younger average age than the overall population and consists of individuals who are more likely to speak a native language other than English (US Census Bureau 2007). These language patterns point to the large number of Latinos who are first-generation immigrants. The fact that these immigrants are increasingly found in rural communities across the US (Passel and Cohn 2009) makes the study of Latinos in rural communities of particular relevance and interest.

Child rearing is human activity found across all cultural groups, and child-rearing practices are culturally-based (e.g., Achhpal et al. 2007; Ceballo and Hurd 2008). All parents face stressors, and adverse contexts negatively impact parenting effectiveness (Belsky 1984; Connell and Goodman 2002; Dishion and Patterson 2006). Immigrant parents confront added stressors related to the disconnection between themselves and their young children in terms of values and practices, which can diminish parental authority and increase family conflicts (Meléndez 2005; Portes and Rumbaut 2001). In addition, immigrant Latino parents face unique contextual stressors, such as acculturation stress (White et al. 2009). Finally, although evidence based parenting interventions are relatively well disseminated, immigrant Latino parents may have difficulty finding help from social service systems poorly prepared to serve diverse populations (Atdjian and Vega 2005; Garland et al. 2005).

According to Walsh (2003), immigrants' successful adaptation to a new country is supported by maintaining connections to "valued customs, kin, and the community left behind" (p. 10). As such, interventions that incorporate families' cultural values and beliefs and use culturally consistent and acceptable techniques to support effective parenting can promote positive family outcomes. Culturally adapted interventions for children have been found to reduce children's externalizing problems and parenting stress, as well as improve parenting practices (Matos et al. 2006). Of particular importance, cultural adaptation improves recruitment, retention, and effectiveness of interventions (Reese and Vera 2007). A recent meta-analysis of 65 studies targetting ethnic minotiries in treatment research found that outcomes were enhanced (a) for culturally adapted treatments compared to non-adapted, (b) as a result of the number of adaptations (more adaptations result in better outcomes), and (c) when treatment, and thus adaptations, were targeted to one ethnic minority group as opposed to various groups (Smith et al. 2010). Given the significant projected growth in all minority groups in the US, particularly Latinos (US Census Bureau 2006), culturally adapted interventions are becoming more crucial now than ever before. A recent publication specifies that best practices in prevention include "culturally relevant prevention practices that are adapted to the specific context in which they are delivered and that include clients and other relevant stakeholders in all aspects of prevention planning and programming." (Hage et al. 2007, p. 496).

Cultural Adaptation of Existing Interventions

Cultural adaptation implies a definition of culture that must be directly addressed (Betancourt and Lopez 1993; La Roche and Christopher 2008). For the purposes of this research, culture is defined as "the belief systems and value orientations that influence customs, norms, practices, and social institutions, including psychological processes (language, caretaking practices, media, educational systems) and organizations" (APA 2003, p. 380). Inherent in this definition is the idea that that culture is dynamic and every individual has a cultural and ethnic heritage. Identifiable

[1] Latinos is a term used to refer to people with origins in countries where the primary language is Spanish or Portuguese. The gender inclusive term would be Latino/a, however, this nomenclature can visually interrupt reading flow. As such, the term "Latino" will be used to refer to both males and females.

cultural groups transcend individuals' idiosyncrasies such that an "outsider" could reliably identify observed patterns of behavior.

Within a treatment context, cultural adaptation has been conceptualized as the modification of a protocol to make it "compatible with the clients' cultural patterns, meanings, and values" (Bernal et al. 2009, p. 362). More broadly, it has been conceptualized to include (1) modifications to treatment content, and (2) changes to the therapeutic relationship and delivery, to accommodate clients' world views and accompanying behaviors (Whaley and Davis 2007). Bernal et al. (2009) sent out a special call to the field to systematically make such modifications to increase the capacity to examine their utility in a research context.

The cultural adaptation models used to inform changes in the present effort were as dynamic as the definition of culture. How culture is considered in the adaptation process may vary from model to model. There are at least nine known guides or models of cultural adaptation: Ecological Validity Model (Bernal et al. 1995; Bernal and Sáez-Santiago 2006); Cultural Accommodation Model (Leong 1996, 2007; Leong and Lee 2006); model of essential elements (Podorefsky et al. 2001); Cultural Adaptation Process Model (CAP; Domenech-Rodriguez and Wieling 2004); data driven adaptation (Lau 2006); heuristic framework (Barrera and Castro 2006); Psychotherapy Adaptation and Modification model (Hwang 2006); and adaptation model for American Indians (Whitbeck 2006). See a review of most of these models in Zayas et al. (2009).

Multiple models of adaptation and multiple approaches to pursuing culturally sensitive therapies can be considered as strengths given the urgency to reach underserved populations (Cardemil 2008). This conceptual pluralism can be combined with methodological pluralism so that researchers can continue building on existing knowledge to promote the dissemination of evidence based treatments to ethnic minorities within the US and extending US-developed programs to other countries (La Roche and Christopher 2008).

Cultural Adaptation Models in the Present Research

The cultural adaptation procedure presented here followed the process model of Domenech-Rodriguez and Wieling (2004) and the ecological validity model (EVM) of Bernal et al. (1995). At the outset of this research, the only known cultural adaptation model was the EVM, which focuses on adaptations to the content of an evidence based treatment manual and therapy context. However, the principal investigator felt the need for a broader process that included the community being served as well as treatment developers. The Cultural Adaptation Process model (CAP; Domenech-Rodriguez and Wieling 2004) was conceptualized to be used in conjunction with the EVM. The cultural adaptation of the treatment manual and the research and treatment processes were not linear, that is, lessons learned were incorporated over the course of the entire research project. For example, as new barriers to group attendance were uncovered across all groups, the research team problem-solved strategies to meet families' needs, thus addressing process issues. However, for the sake of clarity, the adaptation process will be presented in a linear fashion, starting with applications of the process model and followed by adaptations made based on the ecological validity model.

Cultural Adaptation Process Model

The Cultural Adaptation Process model is organized in three phases (see Table 1). The first phase, setting the stage, outlines activities to undertake before intervention. Phase 2 begins the adaptation through engaging the community of interest. The third phase encompasses activities during the intervention trials where adaptations are iterative. The CAP model was developed based on the work of Everett Rogers on diffusion of innovations and involves important persons in the process of implementing a new "technology" (i.e., intervention), such as change agents (i.e., treatment developers), opinions leaders (i.e., cultural adaptation specialist), and collaboration between those and local communities. Roger's diffusion of innovations model (Rogers 1995, 2002) firmly places community at the center of any dissemination effort. From Rogers' "reinvention" perspective, a local community may adopt a technology in a new way, different from the original intention, and this may lead to positive results. For a detailed review of the CAP model, see Domenech-Rodriguez and Wieling (2004). For a summary of cultural adaptations made following this model, see Table 2. This table also specifies procedures and content prescribed in the CAP for cultural adaptation, some of which were already in place in the original intervention.

Phase 1: Background

Phase 1 identifies four steps, each intended to occur in combination with the others. The steps, not in order of importance, are: (1) a collaborative relationship is forged between the treatment developer[2] and the cultural adaptation specialist[3] (CAS), (2) the CAS examines the fit of the

[2] The treatment developer was Dr. Marion Forgatch at Oregon Social Learning Center and Implementation Science International, Inc. a senior research scientist at OSLC and the director of ISII.

[3] The cultural adaptation specialist was Dr. Melanie Domenech Rodríguez, a bilingual, bicultural university professor with a program of research and practice in Latino/a mental health.

Table 1 Cultural adaptation process model

Phases	Activities
Setting the stage	Treatment developer and cultural adaptation specialist collaborate
Initial work between stake holders (community, cultural adaptation specialist, intervention developer)	CAS examines fit of the concepts/techniques with relevant literature
	CAS collaborates with key community leaders to assess intervention interest/need
	CAS assesses community needs; evaluates possible adaptations to intervention
Initial adaptation	CAS and treatment developer tailor intervention a priori
Pilot work on both the intervention and the measures used to evaluate it	CAS evaluates measures for theoretical and cultural appropriateness
	CAS observes adaptations in the field; makes revisions in consultation with treatment developer
	Test and revise with input from treatment developer
Adaptation iterations	Adaptations to intervention are captured in new version of treatment manual
Continued commitment to the iterative process of adaptation	Changes to measures are finalized and field tested
	Consultation with treatment developer regarding possible decentering
	Make plans for replication and further field testing of measures and intervention

intervention with relevant literature (e.g., cultural adaptation, psychotherapy outcomes, Latino mental health), (3) the CAS meets key community leaders to examine interest and needs. Key community leaders are stakeholders who can speak to community needs (e.g., teachers at the local Migrant Head Start could speak about Latino parents' challenges in parenting). Finally, (4) the CAS conducts a needs assessment and gathers information to inform adaptations to the intervention.

For this project, the collaboration between the treatment developer and the CAS grew over the course of several years through the Family Research Consortium-III (FRC-III). FRC-III was comprised of a community of collaborative scholars focused on increasing knowledge in socioeconomic and racial/ethnic diversity, family processes, and child and adolescent mental health. The treatment developer and the CAS were each engaged in a professional collaboration where mutual goals (i.e., cultural adaptation and delivery of treatment to Latinos) were stated overtly, and philosophies about mental health, well being, and intervention were articulated clearly. The treatment developer provided formal training on PMTO interventions, with emphasis on developing technical expertise (e.g., session structure, the specifics of the core parenting components, observational procedures), conceptual understanding (e.g., Social Interaction Learning Theory), and important therapeutic process skills (e.g., preventing and managing resistance, interactive teaching). The CAS had approximately 4 years of PMTO training before the adaptation activities were carried out, and about 6 years of PMTO training before intervention activities were begun. Training in the intervention and adaptation procedures at the local community site was conducted by the CAS.

Throughout, the treatment developer made intervention materials readily available and created training opportunities to support skills acquisition and promote implementation fidelity for the CAS, advocating for adherence to the components identified as mechanisms of change (e.g., core parenting practices) for the child outcomes. The treatment developer was open to changes that would make the intervention material relevant and accessible to Spanish-speaking Latinos while retaining fidelity to the theoretical principles. There is a debate in the literature regarding the dynamic tension between sustaining fidelity to empirically based interventions versus cultural adaptation (see Parra-Cardona et al. 2009). In the present research, the interaction between the treatment developer and CAS was indeed dynamic and at the same time an enjoyable and productive collaboration that continues to evolve more than a decade after it began. In addition, the CAS reviewed the literature to examine fit of the intervention with the state-of-the-knowledge, covering areas of cultural adaptation, developmental context, parenting practices, treatment, and treatment outcomes with Latino populations, among others.

The assessment of community needs required more than 18 months. The local community was rural and conceptualized at the level of the county rather than the city. At the time of the study there were approximately 100,000 residents in the county and a Census geographical report of 1,164 square miles. Many local immigrants had moved from a urban US-location (e.g., Los Angeles) to a more rural setting, citing safety considerations for themselves and their families. The CAS met with key community

Table 2 Summary of CAP adaptation and fit with original PMTO

Phase	Process and content adaptations	Fit with original PMTO
1: Treatment developer and CAS collaborate	CAS and treatment developed stated goals for collaboration	CAS trained on the PMTO model
1: CAS examines fit of the concepts/ techniques with relevant literature	Latino mental health, intervention research, prevention research, specific PMTO research (theory, outcomes), parenting practices, parenting styles, and specific intervention components within population of interest (e.g., monitoring in Latino families)	Review/literature search on literature on parenting practices, prevention research, intervention implementation, etc. with broad application Review on PMTO, Social Interaction Learning Theory and its components (e.g., monitoring)
1: CAS collaborates with key community leaders to assess intervention interest/need	Met with key community leaders, Latino and White Assessed their perception of community need Assessed their interest in parenting intervention. Where engagement was high, invited them to participate in efforts	Open collaboration process (e.g., materials are readily available for review/feedback)
1: CAS assesses community needs; evaluates possible adaptations to intervention	Focus groups to learn about parenting goals, challenges in parenting Examined community resources (organizations, interest groups within organizations, individuals)	Standard operating procedures for PMTO implementation call for manuals that are developed for population of interest, selecting core components (e.g., effective limit setting, encouragement), and adding information for specific population of interest
2: CAS and treatment developer tailor intervention a priori	Reviewed and discussed previous translations of PMTO manuals CAS and treatment developer discussed potential changes to materials and structure	Previous manuals (PTC, MAPS, Currículo de Paternidad Positiva) are used to build the CAPAS manual
2: CAS observes adaptations in the field; makes revisions in consultation with treatment developer	CAS observed through leading groups and supervising other group leaders	Opportunities for observation of training and implementation with non-Latino populations were on-going
2: CAS evaluates measures for theoretical and cultural appropriateness	Mostly literature search for survey measures (e.g., are measures used/normed with Latinos?) Pilot work with behavioral observation methodology and coding system ($n = 50$; Domenech Rodríguez et al. 2006) Included measures that were sensitive to population (e.g., acculturation, perceived economic strain)	Examined general sensitivity of measures that are typically used at OSLC as well as reliability, validity, and other available psychometric data
2: Test and revise(measures) with input from treatment developer	Eliminated mid-week data collection. Kept trouble-shooting component of the call	Some original measures presented excellent flexibility (e.g., hot topics lists) to add, delete, or change items Because some measures were created "in house" (e.g., observational coding system), changes made with careful attention to concepts were easily and promptly verified
3: Adaptations to intervention are captured in new version of treatment manual	Each parent group had a new revision of the manual	Standard procedure is that each intervention group has a manual that fits the needs for that group. Examples are flexibly applied
3: Changes to measures are finalized and field tested	Pilot work with measures led to elimination of scales (e.g., developmental expectations) and inclusion of new measures (e.g., parenting stress) in the randomized controlled trial Added measures on cultural values of respeto and familismo	Multiple methods of gathering data are prescribed. This approach serves to strengthen the confidence in findings when detected across varied methods, especially when some instruments are not validated with Latino samples
3: Consultation with treatment developer regarding possible decentering	New materials developed (e.g., origami exercise) easily could be used with White American or other groups. New materials were back-translated and reviewed by Dr. Forgatch for adherence to intervention theory/model	Decentering is arguably built into the research and intervention process. Standard procedures include the expectation that intervention materials and content will be adapted for local use as long as there is adherence to the core elements

Table 2 continued

Phase	Process and content adaptations	Fit with original PMTO
3: Make plans for replication and further field testing of measures and intervention	Active projects in Puerto Rico (Domenech Rodriguez, PI) and Mexico (Amador Buenabad, PI) to test measures Active project in Mexico (Amador Buenabad, PI) to implement PMTO Active grant to test a randomized controlled trial in Michigan (Parra-Cardona, PI)	Michigan state-wide dissemination effort includes a diversity team that is informed by the findings in the present research and other projects like it (e.g., Amador Buenabad, PI; Parra Cardona, PI; Wieling, PI)

leaders, including Latino and White American leaders. Latino leaders were seen as leaders in the eyes of Latino community members although they tended to have limited power within the institutions where they were employed (e.g., parent liaison at local elementary school). Nevertheless, they held power in important places (e.g., facilitating access to schools for assessment and intervention activities). Contacts were organized formally, by requesting meetings with specific individuals. Some chose to meet in formal settings (e.g., school principal's office), while others preferred more informal settings (e.g., a local coffee shop).

Through formal and informal contacts, White American and Latino community leaders alike agreed that a local parenting intervention was needed and desired for Latino parents. Some community leaders reported being at a loss for appropriate referral programs (e.g., there were few, if any, free or low-cost Spanish-speaking parenting classes) when problems became apparent (i.e., parents were targeted by school personnel for some observed behavior that was considered problematic). When there were problems, some White American leaders reported uncertainty about how to intervene, partly for fear of ignorance about cultural mores and accidentally offending parents or promoting interventions that might have iatrogenic effects. A few key leaders were instrumental in moving the research efforts forward. For example, a Latina center director was so excited about our work that she provided the research team with a list of families to contact, personally called them to encourage their participation, volunteered with the assessments to increase parents' comfort with the researchers, and even provided a key to her center so we could conduct groups there. A community member asked for materials to disseminate to parents at her work site; similarly, a school staff member asked for materials that she could disseminate at her school. These CAS-initiated contacts with key community leaders to assess needs and interest led to spontaneous support offered by community members to enhance the project's success. This supportive collaboration was maintained over the years of CAPAS implementation

Phase 1: Focus Groups

As part of the activities to assess community needs, the CAS and her research team conducted ten focus groups. Parents were asked the following questions: (a) How do you describe what you do with your children? What words do you use? (b) What do you think of when you think of good/bad parenting? (c) How do you parent your child? (d) Are there other people that parent your child? (e) Do you parent differently in the US than you did/would in Mexico? How?

Focus groups ranged from 1 to 7 participants ($M = 4.8$, $SD = 2.9$) and lasted approximately one and a half hours. Participants were 25 mothers and 16 fathers (parents could represent the same family). Most parents reported being married (80.5%) and born in Mexico (90.2%). For those that reported the information ($n = 37$), age ranged from 28 to 47 years ($M = 35.8$, $SD = 4.5$). The level of education of parents was low, with 45.8% reporting a sixth grade education or less, and 42.9% reporting between seventh and twelfth grade education. Six parents did not provide data for this item. For those that reported time living in the U.S. ($n = 35$), time ranged from 1 to 23 years ($M = 12.2$, $SD = 5.7$). Almost half of the participants (48.8%) reported living in the US between 8 and 16 years. Parents had 1–6 children in the home, with the vast majority (68.3%) having 2 or 3 children. A sizeable number of parents reported being "homemakers" (41.5% of the sample, all female), and many (48.8%) reported working full time (6 of 24 females, 14 of 15 males).

Focus group discussions centered primarily on parenting goals and barriers, as these were topics that parents were eager to discuss. Focus groups were audiotaped and group leaders took notes of group content, process, and personal impressions. Review of audio tapes and notes was conducted to generate themes, which were compared between the CAS and a research assistant. Parents in the focus groups identified two important parenting goals to foster: *superación* and *educación*. *Superación* refers to educational attainment and achievements beyond the parents' level. Parents consistently reported this aspiration. Some

parents lamented their lack of opportunities (e.g., in their words: "poor," "uneducated"), whereas others who had opportunities, lamented their poor choices early on. The second theme, e*ducación,* referred to education in a broad sense, in which the goal was to rear children who would grow to be competent and respectful adults. These would be children with a *buena educación*, a good foundation in life.

Parents reported major barriers to parenting. The primary barrier mentioned was language. Some parents reported that they did not speak English well, or at all, while their children seemed to prefer English. In our sample, the vast majority ($n = 30$, 73.2%) of parents reported speaking Spanish at home with their children. When asked what language their child preferred, 26.8% reported their children preferred speaking English, 56.1% said "either," and 14.6% said Spanish. Strikingly, six parents who reported speaking little or no English also reported that their child preferred to speak English. Our focus group findings are not unique. The Surgeon General's report (USDHHS 2001) documented that 40% of Latinos report limited proficiency in English. More specifically, parents reported that language got in the way of assisting their children with homework or communicating with school.

The other two major themes were overwork and children's threats to call 911. Parents reported that demanding work schedules presented a barrier, especially for those who sometimes worked 14-hour days and/or had relatively unpredictable work schedules. Many parents also reported feeling disempowered when their children threatened to call 911. These results are consistent with findings of other parenting researchers working with Latinos (e.g., Parra-Cardona et al. 2009). Parents reported that their children were "trained" at school to call 911 and learned that threatening to call the police was an effective means of gaining control in the family, and, in particular, avoiding consequences for misbehavior and/or noncompliance. Other barriers to parenting, more sporadically reported, were families' structural challenges (e.g., divorce or geographical separation from immediate and extended family), and histories of trauma (childhood and current).

In total, phase one of the cultural adaptation process focused heavily on creating collaborative relationships in multiple contexts and levels. The relationship with the treatment developer provided access to an evidence based intervention and collaboration about the appropriate implementation with both fidelity and the flexibility needed for adaptation. Relationships with community leaders granted the research team access to community members and the structures needed to carry out the research. Finally, relationships with community members involved engagement through focus groups where parents' needs, wants, and challenges were heard and understood so they could be catalogued systematically to inform changes to the process and content of the intervention. Relationship-building continued throughout the assessment and the intervention process.

Phase 2: Measurement Issues

Phase 2 in the CAP model has two areas of focus, (1) the measures used in the research and evaluation of intervention activities and (2) the intervention itself. In the measurement area, the CAS selects and reviews the measures for appropriateness of use with the intervention participants. In the present effort, funding limitations restricted the ability to engage the systematic calibration of measures (see Canino and Bravo 1999). Nonetheless, measures were selected in coordination with the treatment developer (e.g., measures known to be sensitive to change in prior studies) and through literature review (e.g., measures available in Spanish; norms and/or psychometric properties for Latino samples). In the present research program, we employed multiple methods of data collection (direct observations, interviews, questionnaires) across multiple informants (parents separately, teachers), which can enhance future research, as well as increase confidence in the present findings. This methodological approach was consistent with the treatment developer's approach to research and evaluation. One specific measure adaptation was to eliminate a formal assessment of 49 problematic behaviors conducted at the mid-week call.[4] Although administration of this measure was relatively brief, parents reported exasperation with the assessment and we began noticing phone-call avoidance. We continued mid-week calls strictly as part of the intervention to maintain contact with families and trouble-shoot intervention procedures.

Another measurement adaptation involved the data collection process. Initially, data collection procedures specified individual family appointments at a university setting. A family was scheduled for a specific time, research team members were assigned for the appointment, and privacy was maintained. Unfortunately, this resulted in many missed appointments and frustration. Families perceived this arrangement as inflexible. Data collection procedures were altered and informed by the model of medical visits known to the Latino research team members who have lived abroad. Instead of specific appointments, pre-set blocks of time lasting between 3 and 8 hours were set up and coordinated with research team members' availability. Families were called and scheduled for a particular day

[4] A mid-week call is part of the standard delivery of the PMTO intervention. It is intended to maximize parents' opportunities to successfully implement learned principles, thus promoting adherence and generalizability of skills.

and, while encouraged to arrive at a specific time, they were assessed whenever they arrived. Assessors gave out their cell phone numbers so families could notify them of late appointments, emergencies, etc. A child care provider and snacks were on hand for the full block of time. If scheduled families did not show on the data-collection day, assessors called other families to offer the drop-in time. This resulted in speedier and more efficient data collection. Ethical considerations were actively discussed and addressed (e.g., potential loss of confidentiality, respect for people's dignity in the case that parents needed a reader because of poor literacy) and are not reported here due to space limitations.

Phase 2: Intervention Adaptation

In the intervention arena, two activities are central: a priori tailoring of the intervention, conducted by the treatment developer and CAS, and a tailoring of the intervention during the field test. Concerning a priori activities, a few issues are noteworthy. The CAS had the opportunity to engage with the PMTO intervention at various levels, including spearheading the translation of a PMTO manual used in another cultural adaptation intervention trial (Elizabeth Wieling, PI) and participating in the translation of a PMT manual for use in a community-led dissemination effort in Lincoln County, OR (Lew Bank, PI). Two focus groups conducted with parents in Lincoln County at the conclusion of the intervention revealed satisfaction with the intervention and enthusiasm for more. Parents' specific recommendations about materials were used to inform materials development in the CAPAS intervention (e.g., parents engaging in "bad parenting" were depicted in a mocking manner in the visual materials and this felt alienating to parents who had previously engaged in the behaviors; Domenech Rodríguez 2002). The resulting manual adhered to PMTO structure for sessions (e.g., an agenda outlining timing for session activities, key points of information to present parents, and parent handouts).

Phase 3: Adaptation Iterations

The final phase in the Cultural Adaptation Process model specifies that adaptations are made as needed to the intervention, the measures, and relevant procedures. At the same time, it is also important to sustain efforts to test and replicate across populations and sites to ensure generalizability of both process and content changes. In this phase, decentering is explored. Decentering was originally defined in the translation literature (Marin and Marin 1991) and refers to making changes in an original measurement instrument based on the information obtained during translation. By way of an example, a depression screening measure that asks "do you feel blue?" would be ridiculous to translate literally into Spanish (i.e., "¿te sientes azul?") as the respondent would be asked if she felt like the color blue. A more appropriate translation might be "do you feel melancholy?" (i.e., "¿te sientes melancólico?"). The word "melancolía" has a fairly direct translation into English. In decentering, the original item "do you feel blue?" could be replaced for "do you feel melancholy?" Domenech-Rodriguez and Wieling (2004) maintain that an intervention could be decentered as a result of being implemented with other ethnic/cultural groups. Bernal et al. (2009) similarly suggest that information learned in the process of making cultural adaptations can be use to strengthen treatment delivery in general.

Ecological Validity Model (EVM)

EVM specifies eight areas of attention when delivering an evidence-based intervention to Latinos. A summary table of adaptations made following this model is presented in Table 3. As with the Table 2, Table 3 provides information for adaptations made, but also for areas identified within the theoretical cultural adaptation model that were already addressed in the standard PMTO procedures.

Language

A good adaptation ensures that language used in the context of treatment is understandable, culturally appropriate, and culturally syntonic. Syntonicity transcends the mere use of understandable and/or acceptable language and focuses on responsiveness and maintaining balance in a social interaction through words.

The original PMTO materials were developed and tested in English. The CAPAS translation was preceded by two major translation efforts. In one, a PMTO manual was translated into Spanish in Lincoln County, Oregon, by community members; in another, a PMTO manual was translated into Spanish by a translator in Mexico City. Both manuals were used in drafting the CAPAS manual. Once a complete CAPAS manual was available, the CAS took the manual to Mexico City where it was revised by a local psychologist.[5] Further changes were made locally. Language changes were captured in groups and discussed at regularly scheduled research team meetings. Revisions were continually made in response to parents' observed reactions to language used by interventionists during parent groups.

[5] Many thanks to Nancy Amador Buenabad for her invaluable assistance.

Table 3 Summary of EVM adaptations and fit with original PMTO

	EVM adaptations	Fit with original PMTO
Language	Translated to Spanish; language continually revised from observations of language use within parent groups	Some materials developed at OSLC (i.e., pilot work in Lincoln County; translation of PTC in Mexico City) were already available in Spanish by the time of this study
	Feedback for CAPAS manual sought and obtained in Mexico City	
	Moved to simple language, used visual instead of verbal when possible on handouts	
Persons	First generation Latinas	Attention to parental status and acknowledging limitation in parenting experience
	Working group had different notions of "professional boundaries" (e.g., accompanying parents to medical appointment)	
Metaphors	Latino-specific dichos were generously incorporated into the manual	Use of "parents raps" were already standard procedure
	New dichos were incorporated as parents used them during the parent training sessions	
Content	Used cultural values (explicitly stated) to frame goals (e.g., respeto)	Specific examples generated through group discussions
	Explicit discussion of values, especially Latino values of the parents vs. the Latino/American values of their children	
Concept	The goal of treatment is to promote family harmony as well as parents' and children's success. These goals are showcased in the title of the intervention manual "Criando con Amor: Promoviendo Armonía y Superación"	Social Interaction Learning theory is an especially good fit with flexible consideration of contextual stressors upon parenting practices
		Basic behavioral principles of reinforcement and punishment apply to Latino families
Goals	Treatment goals are framed in culturally relevant manner, for example, encouragement leads to increased displays of *respeto* and *buena educación*; effective limit setting leads to more *respeto*, not fear; participating in problem solving helps support a child to *valerse por si mismo*; positive involvement creates opportunities for teaching a child *buena educación*	Treatment goals are essentially the same as in original intervention: to increase skills encouragement, positive involvement, effective problem solving, effective limit setting, and monitoring
Methods	Mid-week assessments were dropped	Homework was conceptualized as "practice assignments" to encourage the focus on the positive and guard from alienating parents who have a suspicious or negative attitude toward the educational system
	Family members were invited (brother, sister) as persons that co-parented even if they were not the bio parent or lived in the home	Mid-week calls are used to check in with parents' progress, trouble-shoot, and continue rapport-building
		Groups were scheduled on weekday evenings to accommodate parents' work schedules and family responsibilities
Context	Contextual issues were relevant to the treatment process in the form of examples, stated challenges to parents in parenting (e.g., fear of having children call CPS and having deportation be a possible consequence)	Dinner, childcare, and transportation is provided when resources are available, either through research grants or community mobilization

Two noteworthy examples of language negotiation involve the concept of "praise" and the term "Time Out." Initially, praise was translated as "aliento" (i.e., strength) in the manual. However, over the course of various groups, other words such as "elogios" (i.e., praise) and "halagos" (i.e., flattery) were presented as more familiar and preferred by families, especially since for some the word "aliento" elicited the definition of "breath" rather than "encouragement." This simple translation reflected differences in word use across different Latin American countries and even regions within countries. Since the concepts were equivalent, we simply included a list of synonyms so that interventionists could refer to the various words and support group members in selecting the preferred term.

The negotiation of the term "Time Out" was of a different nature. As parent groups progressed, we learned that Time Out was not a discipline strategy that parents used, although they were familiar with it because it was used in their children's schools and/or daycare. The concept was translated as "Tiempo Fuera," mirroring the language used in sporting events. Many of our parents found the translation odd, but eventually settled into its usage after

discussions failed to generate a suitable alternative. In some groups, parents preferred simply using the English words Time Out. Some parents reported that this was a commonly used Anglicism, and others said that Time Out was an "American" concept and as such we should simply keep the English words.

Persons

The persons category in the EVM refers to client-therapist match. Bernal et al. (1995) ask: Are clients comfortable with (a) the therapy relationship, and (b) the similarity (or difference) in the ethnicity of therapists? In the PMTO method, the education level of therapists is flexible. The intervention can be delivered by a person well trained in PMTO regardless of level of education (Forgatch and Patterson 2010). One goal could be to train community members to deliver the PMTO/CAPAS intervention. In the present study, interventionists were formally educated Latinas: a Ph.D. level licensed psychologist (Puerto Rican, native Spanish speaker), and 3 graduate doctoral students each with at least 2 years of clinical experience (Puerto Rican, native speaker; Peruvian, near native speaker; Brazilian, near native speaker). All student interventionists were first-generation Latinas, and this served as common ground with parents who were also immigrants. Only the Ph.D. level psychologist was a parent, which was a point of "buy in" for parents. The potential distance created between parent and therapists who were not parents was directly addressed, and therapists promoted collaboration by using empowering raps (e.g., "you are the expert on your child, I am the expert on behavior, together we can figure out something that will work for your family").

Metaphors

Two primary questions drive adaptations in the metaphors dimension of the EVM: (1) Do sayings, or *dichos*, common to Latinos appear in the treatment manual? and (2) Are symbols associated with Latinos part of the treatment environment? The CAPAS intervention was delivered entirely in a community context, with some groups held in a "Latino parent-liaison" room at a local school, and other groups delivered in a community parent center where parents attended many other activities. While the community parent center was not decorated with relevant Latino symbols, the school classroom had many decorations in Spanish and contained numerous relevant cultural symbols. Parents appeared quite comfortable at both sites. *Dichos* were generated from many sources, including books (e.g., Glazner 1987), parental reports during focus and intervention groups, consultation with colleagues in Mexico, Puerto Rico, and Brazil, and consultation with friends and family in Latin America by members of the research team. *Dichos* were incorporated generously into the treatment manual (e.g., "a buen entendedor, pocas palabras bastan") to encourage short, directive statements to children), and new *dichos* were incorporated as parents used them during the parent training sessions. For example, some parents did not understand "más vale maña que fuerza", a *dicho* used to encourage parents to use strategic discipline rather than physical discipline, and so alternative *dichos* were solicited and alternatives—"el que persevera alcanza"—were found. A list of *dichos* was kept in the manual and updated as each group was delivered.

The use of *dichos* is particularly significant for this intervention because the concept of *dichos* (short, concise sayings that deliver a strong message) already existed in PMTO as "raps" (e.g., parents are their children's best teachers). Somewhat humorously, the concepts of "raps" have not been evenly popular across OSLC interventionists (Forgatch, personal communication), yet are an excellent fit for Latino parents. Parents did not have to be introduced to the concept of "raps" because there was a clear cultural understanding of *dichos*. As such, in addition to using established *dichos*, we also translated existing raps (e.g., "los padres son los mejores maestros de sus hijos"). These were accepted readily.

Metaphors that were relevant to the intervention were also incorporated. One short metaphor, "caer en la trampa" (fall in the trap), was used to infuse humor into imperfect role plays. This metaphor was well received. Some metaphors, however, did not work. For example, the original PMTO intervention included a "sandwich" metaphor to illustrate a sequence of parent–child interaction wherein the parent opened an interaction by giving a good direction (one bread slice), the child responded (the sandwich filling), and the parent closed the interaction with another response (the second slice of bread). Because sandwiches are not a common food in many Latin American countries, the metaphor was changed a priori to a treasure chest, wherein the parents opened the interaction (opening the treasure chest), the child filled the chest (with either treasure or sand), and the parent closed the interaction (closing the lid). Across at least three groups, however, parents found the metaphor confusing and interventionists found it difficult to explain. Ultimately the metaphor was abandoned and replaced with a dance metaphor, which is also used in PMTO, wherein parents and children's interactions work best when the two are in-step with each other.

Content

Content refers to cultural knowledge and the EVM advances two questions in this area: does the treatment manual use case examples that reflect common values and

other issues relevant to Latinos? and does the patient feel that the therapists respect his/her cultural values? Regarding the first question, examples were generated through group discussions rather than in the manual, allowing for greater flexibility in finding appropriate case examples. The interventionists addressed values when they arose by labeling them and acknowledging their importance in parents' childrearing goals. For example, in the context of discipline, case examples were presented and framed in the context of valuing "respeto" as a parental goal. Discussions solicited behavioral indicators of respect, and subsequent intervention activities were designed to meet those indicators. If using a soft voice was part of the behavioral manifestation of *respeto*, role plays could focus on teaching children to use a soft voice by expressing the expectation clearly and letting the child know when they had met the mark. There were also opportunities to discuss challenges associated with the differences in the parents' values (based more in the culture of their country of origin) and their children's values (sometimes based more in US-mainstream culture). Finally, values were also infused into the interactions between interventionists and parents and were evident, for example, in the use of "usted" towards parents (showing respect), and greetings that often involved physical displays of affection between interventionist and parents (showing *personalismo* and *simpatía*).

Concepts

Treatment concepts in the EVM are examined for their relevance to culture and context (e.g., dependence vs. interdependence) and three guiding questions are posed: are treatment concepts framed within acceptable cultural values? does the client understand the problem and the reason for the treatment? and is the client in agreement with the definition of the problem and the specific treatment? The latter two questions were easily addressed, as parents sought participation in the intervention due to concerns about their children's non-compliance. Important concepts in the intervention were reinforcement, punishment, and contingent behavior, all framed as "teaching," as is usual within the PMTO tradition. The family's interactional pattern is also a central concept as the intervention is based on Social Interaction Learning theory. Central to PMTO are goals to increase positive parent–child interactions and decrease coercive interactions. These goals were clearly understood by parents and seemed to be consistent with existing parental goals. More importantly, parents reported in groups that punishments led to negative parent–child interactions and they wanted to avoid the subsequent disruption of the parent–child relationship and the possibility that children learned to "fear" instead of "respect" them.

Goals

Goals should focus on transmitting positive adaptive cultural values and supporting existing adaptive values from the culture of origin. Specific questions in this domain include: are treatment goals framed within adaptive cultural values of the patient? are treatment goals consonant with cultural expectations of therapy? and does the patient agree with the goals of treatment? The two primary parental goals generated in focus groups, "superación" and "educación," became important stated goals in the intervention. Indeed, the title of the treatment manual, *Criando con Amor: Promoviendo Armoníá y Superación*, prominently reflects the importance of *superación*. During the course of the intervention, treatment goals were framed in a culturally relevant manner. For example, encouragement—taught through skills such as good directions, and incentive charts—was framed as teaching *respeto* and *buena educación*. Effective limit-setting was intended to increase *respeto*.

Methods

Two important questions guide adherence in the methods domain: are the treatment methods framed within adaptive cultural values of the patient? and does the patient agree with the methods of treatment? The CAPAS intervention was delivered in a group format, in eight once-weekly sessions. This was planned at the outset to maximize the number of families that could participate in the research. Serendipitously, during focus groups, parents expressed interest in groups because it would allow them to meet other parents in the community and expand their social support sources. Groups were scheduled on weekday evenings to accommodate parents' work schedules and family responsibilities.

Some parents initially reported that they did not like the role play method of teaching and learning, but invariably acknowledged the importance of practicing (e.g., when they had an unexpected strong emotional reaction). This is a common experience for PMTO participants across ethnic groups. As the intervention progressed and parents' preference for active and engaged learning became evident, new exercises were developed to increase the number of these activities. One particularly popular section involved an exercise in which parents taught each other how to make an origami figure. The exercise was used to illustrate the importance of voicing clear expectations and using clear directions in teaching children new skills. In addition to responding positively to the exercise in session, parents also consistently reported appreciating having a new activity to share with their children what they had learned

in "class" (most parents called the intervention groups, "clase").

A couple of notable areas of good-fit were observed with standard PMTO procedures. One was homework, another treatment method, which was conceptualized as "practice assignments" to encourage the focus on the positive and guard against alienating parents who had a negative attitude toward the educational system. Adherence to homework was no lesser or greater than that observed in other intervention groups and the challenges to homework completion were similar to those reported elsewhere (e.g., busy, no opportunity for practice). Mid-week calls were used to check in with parents' progress, trouble-shoot, and continue rapport-building. Finally, an important method that appeared to be appreciated by families was the make-up session: when families reported that they would not be able to attend a group, a make-up session before the next group session was offered. This is consistent with PMTO's focus on mastery. When PMTO is delivered in individual family sessions, new practices are added only as families achieve mastery. Of course, this is not possible within the group format.

Context

Consideration of changing contexts during the intervention is critical to the EVM. Guiding questions are: does the treatment manual consider contextual issues such as migration and acculturation stress, social supports, family relationships in country of origin, and barriers to treatment common to Latinos? are transportation vouchers and reminders about sessions available to patients? and do patients view therapists as caring about their social and economic situation? In keeping with standard PMTO practice, our program addressed treatment barriers by facilitating transportation when needed and providing dinner and childcare during the intervention groups. Mid-week calls served as session reminders. More specific to our efforts with Latino families, interventionists went "the extra mile," sometimes accompanying parents to medical appointments (e.g., see Domenech Rodríguez et al. 2008) and facilitating access to needed services (e.g., medical) or goods (e.g., formula), especially when it was evident that parents needed an advocate. These issues were directly the result of parents' cultural and economic context; being a Latino with a low level of education and low-to-no English proficiency created a need for support that is not characteristically observed when working with White American families. Contextual issues were also quite relevant to the treatment process in the form of examples and active acknowledgement of unique parenting challenges (e.g., fear of deportation resulting from a child's 911 threat).

Engagement Results and Discussion

Preliminary Support for the adaptation process and the resulting intervention, *CAPAS*, is provided in retention rate data from the randomized control trial which enrolled 85 families. Of the 85 families that enrolled in the intervention phase of the study, 45 were randomized into the intervention. A full 71% attended at least 6 of 8 groups, and 84.4% were retained when "make-up sessions" are considered. These rates are at least comparable to PMTO intervention trials with White American families (Forgatch 1994) as well as Latino families (Martinez and Eddy 2005). Notably, these rates were obtained despite the immigration raids that took place mid-study and that resulted in families being deported and/or detained, or affected more distally (e.g., a friend of a friend was deported, resulting in heightened fear of detection). Also noteworthy is that the largest drop-out rates occurred in the larger cohorts, where the team's ability to support parents through mid-week calls and timely response to phone calls was somewhat compromised by the size of the groups. These observations were used to calibrate our treatment delivery as it was occurring so that both the intervention manual and the intervention delivery were *at all times* responsive to the needs of the community which it sought to serve. An additional marker for success can be inferred from the continued requests for services that the team receives from parents, even after the termination of data collection. Furthermore, preliminary outcome data show intervention impact in important variables of interest (e.g., effective limit setting; Domenech Rodríguez 2008).

Reflections of Cultural Adaptation Process

Tailoring intervention programs is essential to accommodate the diversity of experiences, traditions, and circumstances of those seeking services. Adaptation is a common practice, yet failure to document the adjustments made while confronting the inherent challenges obviates systematic replication. The adaptations reported here, for the most part, were not striking (e.g., use words and metaphors that make sense to the persons presenting to treatment). However, some might be shocked to learn that this flexible approach to intervention implementation is part of *standard and expected practice* for PMTO (Forgatch and Patterson 2010) and other treatment protocols. To this effect the focus on understanding theoretically driven principles that inform the content and processes is essential for effective adaptation to take place. Those who recommend rigid translations and rote memorization of scripts for evidence-based treatments are likely to have little success in transforming interventions for new populations.

One manner in which this "flexible approach as standard practice" is readily apparent is in the fidelity rating system of PMTO (Forgatch et al. 2005). Fidelity to the intervention is assessed with ratings on knowledge, structure, teaching skills, clinical skills, and overall development. Content is but one dimension. This approach to fidelity privileges function over form as outlined by Hawe et al. (2009). Fidelity ratings based on checklists that specify activities and content can be static and lead to rigidity. Fidelity can be assessed at a more conceptual level, which allows principles to be shaped to address contextual needs in a manner that best adheres to the function of the intervention.

Cultural adaptation models can certainly support and strengthen PMTO standard practice. They can also support practice with other evidence based intervention models. This report with evidence from the field addresses the controversy "to adapt or not to adapt." The issue seems primarily theoretical. Evidence suggests that cultural adaptations lead to positive outcomes (Smith et al. 2010). Real-world practice requires tailoring programs to fit diverse needs for individuals and identifiable groups. Cultural adaptation is a specific process that can benefit tailoring, and treatment tailoring is part of standard treatment practice.

When considering transporting interventions from the ivory tower world of clinical trials to implementation in the community, cultural adaptation models can help treatment providers reach out to ethnically diverse clients/groups with programs that may genuinely help. Models of adaptation provide road maps that can help travelers better reach their destinations. Traveling without a guide or plan can result in long detours through impassable routes. Systematic models can be applied across settings and populations and be examined empirically to determine if theoretical relationships inferred from research findings are in fact observed to be related to better treatment outcomes.

In the present effort, the systematic tailoring of a clearly defined evidence-based intervention in terms of its manual and delivery processes was described. Consistent with the process model, and with established PMTO implementation practices, the manual was considered a living document; changes were made a priori and during the course of its application in keeping with the challenges that emerged. In order for a document to be sustain life, however, must have a "keeper". In the present work, that keeper of the manual was the cultural adaptation specialist or opinion leader, in the language of Rogers (2002). Indeed, many local opinion leaders will emerge over time as an intervention is disseminated broadly. Each can be a keeper for a new generation of manuals and/or procedures based on communities' own needs.

The process of community engagement (CAP, phase 1) is, in the authors' estimation, the most critical of all the adaptation activities. Hawe et al. (2009) make a convincing argument for shifting from a paradigm where the community assessment is considered nuisance ground work (e.g., as evidenced in limited grant funding to conduct that work), and move to a central position in the production of quality research. As of now, none of the three approaches to reaching underserved populations (i.e., newly developed, culturally adapted, or as-is intervention) has been proven best. Likely all of these approaches have merit and utility. Considering the community's wants/needs can help best determine a successful intervention approach. For example, if a community wants a "traditional" parenting class in Spanish, cultural adaptation is a likely a good option. If another community wants a parenting class that is "the gold standard for Americans" (practitioners who work with Latinos might appreciate this example as a variation on a familiar script), then an as-is parenting class might be most indicated. In the case that a community wants a culturally targeted class (e.g., parenting to reduce acculturative stress), then an intervention might need to be developed from the ground up.

Future Directions

Following recent calls for broader methods of inquiry (APA 2006; La Roche and Christopher 2008), we recommend that the empirical examination of the cultural adaptation process incorporate multiple methods of assessment, including direct and participant observation. In addition to survey measures, we found that our own efforts in (1) the development and testing of observational coding schemes (e.g., Domenech Rodríguez et al. 2006, 2009), and (2) qualitative data collection, gave us direction as we applied culturally-grounded rationales in the adaptation of some existing practices. Direct observations provided variables at the level of family, overall intervention, and interventionist, thus addressing two of the three broad approaches to culturally sensitive treatments (Cardemil 2008). Direct observations can also be used to track fidelity to the cultural adaptation in conjunction with measures of fidelity for the original intervention (e.g., Forgatch et al. 2005). Qualitative data growing out of participant observation can be gathered in the form of journals (e.g., the CAS and intervention leaders can document their observations about intervention implementation and important cultural processes). Decisions made in such efforts need to be further ascertained empirically. For example, we chose to eliminate the mid-week assessment calls. Another option may have been to shorten the measure or find a different way to gather the data (e.g., at the beginning or end of intervention

groups). There is no clear understanding of how this procedure directly affected outcomes.

Direct and participant observation methods also allow for the examination of complex issues in intervention delivery. Resistance is a common event in treatment. In our study, most parental reactions to time out could be understood in a cultural context. For example, some parents associated placing their child in physical isolation as indicative of neglect or even harshness. When group discussions clarified the intent of time out (i.e., to disengage, to provide a mild punishment for misbehavior) and parents participated in generating viable solutions for implementing time out (e.g., child could be in eyesight of the parent), progress was made. However, in one case, a parent had a negative response that was outside of the norm and could be categorized as resistance. In this case the parent stated that Time Out was an American parenting tool and was not used by most Latino parents; he expressed anger at participating in a group that taught "American parenting". An attempt was made to return to important concepts (mild punishment; disengagement) and to stressing that this tool (time out) is one in a large "tool box" that he can choose to use or not use. The rest of the parents in the group did not express agreement with this parent's opinion and appeared, in fact, annoyed and puzzled by his reaction. Curiously this parent's outburst came at a time when the successful implementation of encouragement techniques (mainly by his female partner) had resulted in positive outcomes for his child and even in engagement from his older son in the parenting groups; the older adolescent saw improvement in his younger brother and wanted to learn what was taking place in these classes. We understood that the family's progress was threatening to this father who had served as the ultimate disciplinarian for his son. With increased maternal empowerment, this father needed support to transform his role as father. These complex clinical issues deserve careful and skillful attention. It is particularly important to distinguish between an intervention's lack of cultural fit and manifestations of therapy processes such as resistance. Cultural adaptations must not be made in reaction to idiosyncratic issues.

The adaptations presented here were made in the context of a research program. It is our hope that community practitioners cull from these pages pieces that promote the tailoring of evidence-based interventions to communities in which they have not yet been tested. The theoretical constructs are easy to understand and the data collection methods, especially focus groups and interviews with key community informants, do not require a doctoral degree or complicated equipment. They do require a collaborative team approach. It is also our hope that scientists continue engaging communities in research as partners in the research enterprise. Conducting research, we quickly learned, is also a valuable community intervention. For example, some parents experienced assessment appointments as an opportunity to tell someone their struggles and reported feeling relief and improved wellbeing after the assessment activities.

Cultural adaptations can be accomplished with a reasonable amount of a priori work. Process adaptations appear to be critical for engaging the local community and delivering services effectively. While more work is needed to empirically document the impact of culturally adapting existing evidence based therapies, the information presented in this paper may be of interest to community researchers and community practitioners alike who struggle with integrating existing knowledge and state-of-the-art procedures with the realities of working in ethnically, culturally, socio-economically, and other diverse communities.

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