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DOI

[10.1007/s11121-016-0671-2](https://doi.org/10.1007/s11121-016-0671-2)

Publication date

2017

Document Version

Final published version

Published in

Prevention Science

[Link to publication](#)

Citation for published version (APA):

Mejia, A., Leijten, P., Lachman, J. M., & Parra-Cardona, J. R. (2017). Different strokes for different folks? Contrasting approaches to cultural adaptation of parenting interventions. *Prevention Science*, 18(6), 630-639. <https://doi.org/10.1007/s11121-016-0671-2>

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Different Strokes for Different Folks? Contrasting Approaches to Cultural Adaptation of Parenting Interventions

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Published online: 24 June 2016
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Abstract Relevant achievements have been accomplished in prevention science with regard to disseminating efficacious parenting interventions among underserved populations. However, widespread disparities in availability of parenting services continue to negatively impact diverse populations in high-income countries (e.g., the USA) and low- and middle-income countries. As a result, a scholarly debate on cultural adaptation has evolved over the years. Specifically, some scholars have argued that in diverse cultural contexts, existing evidence-based parenting interventions should be delivered with strict fidelity to ensure effectiveness. Others have emphasized the need for cultural adaptations of interventions when disseminated among diverse populations. In this paper, we propose that discussions on cultural adaptation should be conceptualized as a “both-and,” rather than an “either-or” process. To justify this stance, we describe three distinct parenting intervention projects to illustrate how cultural adaptation and efficacy of evidence-based interventions can be achieved using contrasting approaches and frameworks, depending on cultural preferences and available resources of local contexts. Further, we suggest the need to develop guidelines for consistent reporting of cultural adaptation procedures as a critical

component of future investigations. This discussion is relevant for the broader public health field and prevention science.

Keywords Cultural adaptation · Health disparities · Parenting interventions · Low- and middle-income countries · Ethnic minorities

Relevant achievements have been accomplished in the prevention field with regards to disseminating culturally relevant and efficacious mental health interventions among ethnically diverse populations (Castro, Barrera, and Holleran Steiker 2010; Updegraff and Umaña-Taylor 2015). However, widespread mental health disparities continue to negatively impact diverse populations in high-income countries (HIC), as well as low- and middle-income countries (LMICs) (Collins et al. 2011). Addressing mental health disparities worldwide has been recognized as a pressing priority by leading organizations such as the Society for Prevention Research (Hawkins et al. 2015) and the Institute of Medicine (2009). International initiatives such as the global mental health movement have historically advocated for increased access to evidence-based services, particularly in LMICs (Patel and Prince 2010). However, as efforts expand across cultures (e.g., Matos, Bauermeister, and Bernal 2009), so do inherent dilemmas regarding the extent to which mental health interventions require contextual adaptation without compromising intervention effectiveness.

A highly promising area within the global mental health movement refers to the dissemination of efficacious parenting interventions based on their demonstrated capacity to prevent physical, behavioral, and emotional difficulties in children and youth (Institute of Medicine 2009). Parenting interventions have been shown to be effective in reducing child maltreatment and child behavior problems, as well as improving the

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quality of parenting practices and overall family well-being (Barlow, Coren, and Stewart-Brown 2002; Barlow, Smailagic, Ferriter, Bennett, and Jones 2010). However, the literature on their effectiveness among underserved and ethnically diverse populations continues to be underdeveloped (Knerr, Gardner, and Cluver 2013; Mejia, Calam, and Sanders 2012). Thus, it is key to increase access to evidence-based parenting interventions among underserved populations and to understand the best approaches in design and service delivery that are necessary to achieve this goal (Ward, Sanders, Gardner, Mikton, and Dawes 2016).

The Concept of Cultural Adaptation

Cultural adaptation has been defined as “the systematic modification of an evidence-based treatment or intervention protocol to consider language, culture, and context in such a way that it is compatible with the client’s cultural patterns, meanings, and values” (Bernal et al. 2009; p.362). Cultural adaptation is often understood as the adaptation of an existing intervention. However, it is also possible to extract components of existing evidence-based interventions (Chorpita, Daleiden, and Weisz 2005) to create new culturally tailored parenting program manuals (e.g., Lachman et al. 2016a, b). This process is not traditionally encompassed under the umbrella of cultural adaptation research, although it often utilizes its tools and frameworks. Our conceptualization of cultural adaptation in this paper is broad, as it includes a case example of extracting evidence-based principles to create a new parenting program manual responsive to local context.

Relevant conceptual frameworks and tools have been developed to inform cultural adaptation studies. For example, Resnicow et al. (2000) differentiate between *surface-* and *deep-structure adaptations*. Specifically, surface-level adaptations refer to changes in materials or activities of the intervention in order to fit specific characteristics of the target population (e.g., language, music). In contrast, *deep-structure adaptations* involve addressing deeper cultural, social, or historical factors that influence the life experiences of the target population. In Resnicow et al. (2000) framework, cultural adaptation is understood as a continuum ranging from relatively minor changes to interventions (e.g., translation of materials), to deeper structural adaptations (e.g., changes in the content).

Bernal et al. (1995) Ecological Validity Model (EVM) includes eight well-defined and interrelated dimensions: (a) language, (b) persons, (c) metaphors, (d) content, (e) concepts, (f) goals, (g) methods, and (h) context. The dimension of *language* refers to the adaptations that are required to achieve multiple expressions of linguistic relevance with the target populations (e.g., vocabulary used by interventionists). The dimension of *persons* highlights the need to match ethnicity and native language of clients with research staff involved in

recruitment and intervention delivery efforts. *Metaphors* refer to symbols and concepts that represent an alignment with the cultural values and experiences of targeted populations. *Content* consists of ensuring that themes align with the clients’ socio-cultural worldviews. *Goals* are closely related to content in that the objectives of interventions must match the experiences and expectations of target populations. Finally, *context* and *methods* refer to the importance of considering the contextual characteristics of communities and social enclaves in which populations live (context) and the ways in which all phases of intervention activities (e.g., recruitment, delivery) will be informed accordingly (methods).

The cultural adaptation framework proposed by Barrera and Castro (2006) consists of four adaptation stages identified as (a) information gathering, (b) preliminary adaptation design, (c) preliminary adaptation tests, and (d) adaptation refinement. These stages integrate both top-down and bottom-up approaches. That is, although cultural adaptation might start with initial efficacy trials (i.e., top-down approach), active input is permanently sought from the targeted groups in order to ensure cultural relevance. As a result, there is a continuous process of adaptation at multiple levels aimed at achieving cultural relevance (i.e., bottom-up). To ensure rigor of the adaptation process, interventions must ultimately be evaluated (Barrera and Castro 2006).

Whereas the aforementioned frameworks have distinct features, they also have clear commonalities. For example, all models emphasize the importance of cultural relevance. Cultural relevance can be defined as ensuring that intervention components and procedures remain syntonic with the cultural values and day-to-day experiences of target populations (Castro, Barrera, and Martinez 2004). Achieving cultural relevance is a necessary goal to ensure feasibility of implementation as well as change on target outcomes (Bernal et al. 1995).

The Fidelity versus Cultural Adaptation Debate

Historically, tensions between intervention fidelity and population fit have been central to the prevention field. This paper focuses specifically on the cultural adaptation debate as it refers to parenting intervention research.

The Society for Prevention Research (SPR) has provided an intellectual platform for a scientific debate on fidelity versus cultural adaptation. Some scholars originally suggested that evidence-based mental health interventions should be adapted and tailored to diverse populations in order to achieve optimal engagement, cultural satisfaction, and overall intervention impact (Castro et al. 2004). On the other hand, critics have argued that modifications to original efficacious interventions can diminish the impact of core ingredients and mechanisms of change (Elliott and Mihalic 2004). These scholars support strict fidelity and adherence to original

interventions in order to ensure efficacy and effectiveness (Elliott and Mihalic 2004; Chambless and Ollendick 2001).

Empirical evidence informing this debate continues to be generated. For example, meta-analytic studies on cultural adaptation of mental health interventions indicate that culturally adapted interventions are more efficacious than interventions without cultural adaptations (Benish, Quintana, and Wampold 2011; Griner and Smith 2006; Sundell, Beelmann, Hasson, and von Thiele Schwarz 2015). Unfortunately, research is scarce in the field of parenting interventions specifically. One meta-analytic study did not corroborate the need for cultural adaptation (Gardner, Montgomery, and Knerr 2015). Specifically, Gardner et al. (2015) study suggested that original and generally nonadapted parenting interventions were more effective when transported to countries that did not share the contextual and cultural characteristics of the countries in which the interventions were originally developed. These findings indicate that regardless of cultural differences, parenting interventions can be efficacious when transported to new contexts if delivered with fidelity. However, findings from this meta-analysis must be considered with caution as it only included 11 studies.

The fidelity versus adaptation debate continues to be relevant, but empirical evidence supporting either side of the argument remains inconclusive. A major limitation is that procedures to make parenting interventions relevant and appropriate in diverse cultural settings have not been systematically documented in most trials. Gardner et al. (2015) meta-analysis could not include any information on whether interventions were adapted or not, because adaptations were not reported in the original papers. “In situ” modifications (i.e., adaptations that are not systematically planned but rather occur in the moment or in vivo) are often not measured throughout service delivery (Miller-Day et al. 2013). Other meta-analyses, such as Sundell et al. (2015), use a dichotomous approach to adaptation (i.e., adapted versus nonadapted). This fits with the tendency of the field to use an “either-or” approach (i.e., strict fidelity versus complete adaptation).

In this paper, we intend to move beyond this approach and take a closer look at the broad range of adaptations that can be conducted depending on available resources in specific contexts. In other words, we propose that a way to move forward the fidelity versus adaptation debate refers to understanding cultural adaptation as a “both-and” rather than an “either-or” process. We present insights from three cases of parenting interventions evaluated with diverse populations in contrasting settings. These cases are used to illustrate that cultural adaptation can be a flexible process, should be informed according to existing local resources, and remain responsive to specific cultural contexts. That is, cultural adaptation can integrate fidelity to original components accounting for intervention efficacy, while ensuring high cultural relevance. Furthermore, as the cases demonstrate, the path to achieving

efficacy and cultural relevance is not rigid and can be undertaken with diverse procedures.

Three Contrasting Cases Demonstrating Diversity in Cultural Adaptation Research

In this section, we present two case examples of culturally adapted parenting interventions implemented with Latino populations in contrasting international settings (Panamá and the USA). A third case, while not strictly an adaptation of a specific parenting intervention, modified evidence-based principles and components that are common to most parenting program manuals within a South African cultural context. All cases have in common the aim of reaching parents in a culturally sensitive way. Each used a different approach to reach this aim and was carried out independently (i.e., Panamá, USA, and South Africa). Resembling the Resnicow et al. (2000) conceptualization of cultural adaptation, the first two cases illustrate contrasting approaches to cultural adaptation that ranged from surface-level (e.g., refinement of measures, translation) to deep-structure adaptations (e.g., revised content, qualitative studies). The third case is an illustration of a culturally focused process. Although this intervention integrates common principles and approaches from evidence-based parenting interventions, a context and culture-specific program manual was developed to fully respond to the cultural experiences of the target population.

Table 1 summarizes how activities undertaken in each project align with frameworks previously discussed (i.e., Resnicow et al. 2000; Bernal et al. 1995; Barrera and Castro 2006). Table 2 delineates the research design of each case and the main findings.

Case Number 1: Checking for Cultural Relevance Prior Adaptation

In this case, cultural relevance checks were conducted before deciding to invest in a cultural adaptation process. The cultural relevance and initial efficacy of the Triple P Positive Parenting Program (Sanders 2012) was assessed with families from high-risk low-income communities in Panamá City, Panama. Most families had a monthly income below US\$300, were seeking help to deal with child behavioral difficulties, and self-identified as mestizos or African descendants. Triple P is an intervention originally developed in Australia with strong evidence of efficacy according to multiple studies in diverse contexts (Nowak and Heinrichs 2008). However, this was its first evaluation in a LMIC.

Prior to adaptation, cultural relevance checks were conducted with both parents ($n = 120$) and potential facilitators of the intervention (i.e., school-based practitioners; $n = 80$). This is in line with the *information gathering* stage from

Table 1 Procedures undertaken in each case example according to cultural adaptation frameworks

Case Examples	Resnicow et al. (2000)		Bernal et al. (1995)			Barrera and Castro (2006)							
	Superficial-structure adaptations	Deeper-structure adaptations	Language	Person	Metaphor	Content	Goals	Methods	Context	Information gathering	Preliminary adaptation	Preliminary adaptation test	Adaptation refinement
Case 1: checking cultural relevance of Triple P in Panamá	✓		✓	✓	✓					✓	✓	✓	
Case 2: differential cultural adaptations of PMTO for Latinos in the US	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Case 3: adapting evidence-based principles to develop the Sinoyuyo parenting program in South Africa		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Barrera and Castro’s framework (2006). The rationale for assessing cultural relevance prior adaptation was that modifications might not be needed if local communities considered the original content as relevant and appropriate. Therefore, Mejia and colleagues decided to show a sample of program materials (i.e., videos and workbooks from the *Triple P Every Parent Survival Guide*) to a group of parents and local practitioners. An instrument previously published by Metzler et al. (2011) was used for measuring consumer preferences. Parents were firstly presented with sample materials of the intervention and then asked to rate these materials and its content. Metzler et al. (2011) instrument has no cutoff scores, but ratings can range from 7 to 15 for utility, 9 to 17 for relevance, and 4 to 10 for interest. In this study, utility ratings averaged 13.41 (SD = 1.71), relevance ratings averaged 16.37 (SD = 2.34), and interest ratings averaged 9.24 (SD = 0.96) (Mejia, Calam, and Sanders 2014a). Local practitioners showed comparable scores. In a scale from 1 to 5, utility ratings were $M = 4.58$ (SD = 0.65), interest ratings were $M = 4.46$ (SD = 0.67), familiarity ratings were $M = 4.25$ (SD = 0.88), and acceptability ratings were $M = 4.42$ (SD = 0.86) (Mejia et al. 2014b).

These findings indicated to researchers that the intervention was culturally relevant in its original form, and thus, an extensive adaptation process of the content was not undertaken. However, *superficial-structure* adaptations (Resnicow et al. 2000) were conducted, specifically (1) translating materials into Spanish and (2) having the intervention delivered by a local facilitator. Nevertheless, a posteriori reflections suggested that un-measured adaptations were conducted in situ by the facilitator in order to ensure cultural fit during delivery. For example, the facilitator used culturally relevant metaphors to introduce specific skills and reflect on local challenges. An icebreaker activity was introduced at the start of the session, which is a common practice in this culture to prompt interaction between participants.

After exploring cultural relevance, a pilot efficacy trial was conducted with 108 parents of children 3 to 12 years old (Mejia, Calam, and Sanders 2015). Primary outcome measure was child behavioral difficulties as reported by parents using the Eyberg Child Behavior Inventory (Eyberg and Pincus 1999). Effect sizes were $d = 0.52$ at post-intervention, $d = 0.42$ at 3 months follow-up, and $d = 1.09$ at 6 months follow-up. As recommended in the *preliminary adaptation tests* stage from Barrera and Castro’s framework (2006), a qualitative study was conducted after the trial with a group of parents that took part in the intervention ($n = 25$). Qualitative results confirmed cultural relevance of the original program manual. However, some further adaptations were suggested at this point, specifically including additional support for dealing with neighborhood violence and poverty.

In summary, Mejia and colleagues opted for establishing cultural relevance of an original parenting program manual

Table 2 Description of each project

	Case 1: checking cultural relevance of Triple P in Panama	Case 2: differential cultural adaptations of PMTO for Latinos in the US	Case 3: adapting evidence-based principles to develop the Sinovuyo parenting program in South Africa
Research design	1. Quantitative surveys with parents and practitioners 2. Pilot RCT 3. Qualitative interviews	1. Differential cultural adaptation RCT to compare CA versus CE	1. Identification of evidence-based parenting program components 2. Qualitative evaluation with parents and service providers 3. Pilot RCT
Target audience	Parents of children 3 to 12 years in high-risk low-income neighborhoods in Panama City	First-generation Latino parents of children 4 to 12 years in Detroit, Michigan	Low-income, isiXhosa-speaking parents of children aged 2 to 9 years in South Africa
Intervention	Triple P single-session discussion group delivered over 2 h + two 15-min telephone support sessions	CA consisted of the adaptation of core PMTO components. CE consisted of CA plus two culturally focused sessions	Sinovuyo Caring Families Program, a 12-session group-based parenting program
Intervention aims	To reduce child externalizing difficulties and improve parenting skills	To increase quality of parenting skills and reduce child internalizing and externalizing difficulties	To reduce the risk of child maltreatment, improve positive parenting, and reduce child externalizing difficulties
Outcomes	1. Parent-reported child behavioral difficulties, parenting practices and parental stress	1. Quality of parenting skills 2. Parent-reported child externalizing and internalizing difficulties	1. Parent-reported harsh parenting, positive parenting, and child externalizing difficulties. 2. Observational assessments of positive parenting, harsh parenting, positive child behavior, and negative child behavior
Process evaluation (if any)	Not conducted	Not conducted	Qualitative and quantitative assessments of cultural acceptability, implementation fidelity and quality of delivery, and participant involvement (enrollment, attendance, and dropout)
Significant results	<i>Cultural relevance by parents:</i> utility of intervention $M = 13.41$ ($SD = 1.71$, range 7–15); relevance of intervention $M = 16.37$ ($SD = 2.34$, range 9–17); interest level with materials $M = 9.24$ ($SD = 0.96$, range 4–10) <i>Efficacy on child behavior difficulties:</i> compared to control, $d = .52$ at post-intervention; $d = .42$ at 3-month follow-up, and $d = 1.09$ at 6-month follow-up <i>Qualitative results:</i> (i) <i>Cultural context in which families live.</i> Included codes on economic difficulties, living in a dangerous world, struggling in balancing parenting and work, and using tough communication patterns (ii) <i>Appropriateness of the intervention.</i> Included codes on relevance of content and materials, physical resemblance of actors in videos, socio-economic differences with parents in videos, and recommendations for delivery (e.g., reaching more community members, facilitator having contact with child)	<i>Efficacy on child internalizing difficulties:</i> Compared to CA and control, CE effects were $d = -0.5$ at post-intervention; $d = -0.9$ at 6-month follow-up <i>Efficacy on child externalizing difficulties:</i> Compared to CA and control, CE effects in fathers were $d = -0.6$ at post-intervention; $d = -1.0$ at 6-month follow-up	<i>Cultural relevance by parents:</i> Out of a total score of 100, overall satisfaction $M = 94.22$ ($SD = 5.12$), ability to meet parent goals $M = 89.55$ ($SD = 8.27$), format of delivery $M = 94.41$ ($SD = 11.97$), appropriateness of parenting skills $M = 96.00$ ($SD = 5.81$), quality of delivery $M = 98.62$ ($SD = 3.24$), group supportiveness $M = 97.24$ ($SD = 3.79$) <i>Efficacy on positive parenting:</i> Compared to control, $d = 0.63$ for parent report; $d = 0.57$ for observational assessments <i>Qualitative results:</i> (i) <i>Participant involvement</i> Included codes on structural and programmatic components used to support participation and engagement (ii) <i>Implementation feasibility</i> Included codes on strengthening fidelity and competency by community facilitators (iii) <i>Cultural acceptability</i> Includes codes on receptivity to existing parenting practices, resistance to introduction of new practices, and the importance of contextualizing content within a local cultural framework
Participation rates	85 % of those recruited participated in the intervention	87 % of those recruited were retained (84 % of fathers)	85 % of those recruited participated in the intervention

instead of conducting a priori adaptations. According to Barrera and Castro's (2006) framework, this can be defined as an *information gathering* stage. Survey data prior to the trial suggested high cultural relevance of the intervention in this setting, and thus, only *superficial-structure* adaptations were conducted (Resnicow et al. 2000). These adaptations were tested in a pilot trial, and following the trial, some further recommendations were collected through qualitative interviews (i.e., *preliminary adaptation tests* as referred to by Barrera and Castro 2006). This approach might be appropriate in contexts where resources are not available for *deeper-structure* adaptation. Some in situ cultural adaptations took place during delivery, which suggests a need for developing instruments to keep track of such processes when working across cultures.

Case Number 2: Differential Cultural Adaptation

In this case, two differentially culturally adapted versions of the Parent Management Training—The Oregon Model (PMTO^R)—were evaluated with low-income Latino/a immigrants residing in Detroit, Michigan. The original PMTO intervention was developed with a majority of Euro-American parents (Forgatch, Patterson, DeGarmo, and Beldavs 2009).

The first adapted version of PMTO for Latino/a families was developed and piloted by Domenech-Rodriguez et al. (2011) with parents in the southwest ($n = 85$). This version is known as CAPAS-*Criando con Amor, Promoviendo Armonia y Superación* (Raising Kids with Love, Promoting Harmony and Growth; CA). Adaptations were conducted according to the Ecological Validity Model (Bernal et al. 1995). Materials and language were adapted for appropriateness and relevance with the Latino culture (*language*). Bilingual Latinos were in charge of recruitment, data collection, and delivery (*persons*). Culturally rich phrases and raps were incorporated throughout the intervention (*metaphors*). The dimension of *content* guided the adaptation by identifying and addressing Latino values in materials and sessions. Goals of the PMTO intervention were reframed to ensure adequate match with the Latino culture (*goals*). For example, the promotion of discipline was framed according to *respeto* and family harmony (i.e., *familisimo*). Finally, adaptations were made to ensure responsiveness to contextual challenges faced by the target community (*context* and *methods*). For example, mid-week support calls were dropped, as these were perceived as intrusive (Domenech-Rodriguez, Baumann, and Schwartz 2011).

Building on CAPAS, Parra-Cardona and colleagues developed a culturally enhanced intervention known as “CAPAS-Enhanced (CE)” (Parra Cardona et al. 2012; Parra-Cardona et al. 2009). Specifically, the first CE session provided an overall framework for the intervention focused on Latino culture, immigration, and biculturalism. This session helped parents reflect on themes such as life as a Latino/a immigrant, coping with racism and discrimination, and living between

two worlds (biculturalism). The last session focused on reflections about biculturalism and how the PMTO intervention offers specific parenting tools to families that are conducive to achieve biculturalism. In addition, each core PMTO component throughout the intervention was introduced according to immigration- and culturally focused reflections informed by findings from a previous qualitative study ($n = 83$ parents). Discrimination was identified as a salient theme in the qualitative study. Therefore, parents were asked to identify the extent to which daily immigration-related stressors, such as discrimination or work exploitation, increased the risk they would engage in punitive limit settings practices with their children due to accumulated stress and frustration.

Evaluation of CA and CE was informed by principles of community-based participatory research (Fraenkel 2006). In collaboration with community leaders, feasibility and initial efficacy of the two adapted interventions were examined. Families ($n = 103$) were randomly allocated to one of three conditions (i.e., CA, CE, or wait-list control), and outcomes were measured at baseline, post-intervention, and 6-month follow-up.

In terms of feasibility, an overall retention rate of 87 % of participating families was achieved. Participants in the CA and CE interventions reported high satisfaction with all intervention components with no statistically significant differences between adapted interventions (Parra Cardona et al. 2012). On a scale from 1 to 5, satisfaction ratings across all sessions averaged 4.52 ($SD = 0.062$) in CA and 4.57 ($SD = 0.05$) in CE.

In terms of efficacy, multilevel growth modeling was chosen as analytic strategy to explore differential efficacy of the two versions. When compared to CA, a main effect for CE was found for child-internalizing behaviors as measured with the Child Behavior Checklist (CBCL; Achenbach 2009) at post-intervention ($d = -0.5$) and at 6-month follow-up ($d = -0.9$). CE effects for child externalizing behaviors (also measured with the CBCL) were found only for fathers at post-intervention ($d = -0.6$) and follow-up ($d = -1.0$) (Parra-Cardona et al. 2015).

In summary, this project consisted of a long-term process of adaptation which focused on expanding the original CA intervention according to salient immigration and cultural experiences reported by the targeted population. This is one of the few reported trials testing differential cultural adaptation using a three-group design. Although this design is relevant for the study of cultural adaptation processes and mechanisms, scaling up differently adapted interventions might present challenges. It might not be cost-effective or feasible to implement different versions of an intervention at a large scale.

Case Number 3: Adapting Evidence-Based Principles and Approaches for a Local Context

In this case, an evidence-informed, culturally relevant parenting program was developed and tested in order to reduce the risk of child maltreatment in low-income South African

families with children 2 to 9 years old (Lachman et al. 2016a, b). In contrast to the two preceding approaches, this study did not target a specific pre-existing parenting intervention for adaptation. Instead, the primary goal consisted of examining the transferability of core intervention components and principles of evidence-based parent management training to a South African cultural context. This decision was made partially due to high licensing fees and unwillingness of original developers to sanction the independent adaptation of existing evidence-based parenting programs (Mikton 2012). Furthermore, although there were many local parenting programs being implemented in South Africa at the time of the study, a review demonstrated that none were developed according to evidence-based theoretical frameworks associated with parenting program effectiveness (Wessels and Ward 2015).

The process of intervention development resembled procedures in case no. 2, primarily in its community-based approach of collaborative research (Fraenkel 2006). Lachman and colleagues developed the parenting intervention in three stages. Firstly, authors started by identifying core evidence-based parenting program components in systematic reviews (e.g., Barlow et al. 2010), distillation studies (e.g., Chorpita et al. 2005), implementation studies (Snell-Johns, Mendez, and Smith 2004), and meta-analyses (e.g., Barlow et al. 2002). Existing protocols of parenting interventions that have demonstrated effectiveness in multiple contexts were also reviewed, such as the Incredible Years (Webster-Stratton 2001), Parent Management Training-Oregon (Forgatch et al. 2009), and the Triple P Positive Parenting Program (Sanders 2012). This stage developed theory of change and logic models that specified core evidence-based components common to efficacious parenting programs (e.g., improving positive parenting behavior and reducing harsh and violent discipline in order to reduce child behavior problems and improve child socio-emotional regulation).

The second stage was a qualitative evaluation to assess local stakeholders' perceptions regarding parenting intervention content necessary for inclusion. Focus groups with service providers ($n = 4$; 29 participants) plus interviews ($n = 11$) and focus groups ($n = 10$; 86 participants) with low-income parents examined the suitability of evidence-based parenting intervention components, the potential need for additional culturally specific content, and barriers to implementation and participation. Thematic analyses identified three themes consistent with components found in evidence-based parenting programs (e.g., managing child behavior problems, addressing corporal punishment, and building positive relationships with children). Results also found additional themes specific to a low-income context (e.g., child safety in high-crime communities, involving fathers in parenting, and communicating about HIV/AIDS) (Lachman et al. 2016a, b).

In the third stage, the research team convened a series of workgroups to assess the relevance of evidence-based parenting intervention components for the target population (Lachman et al. 2016a, b). The workgroups also examined the extent to which local contextual factors might affect the integrity of evidence-based parenting principles. These workgroups resulted in the design and manualization of a new evidence-informed, locally relevant parenting program called the *Sinovuyo Caring Families Program*. This 12-session, group-based parenting program incorporates core components of evidence-based interventions previously described, as well as content specific to a sub-Saharan African context including communicating about HIV/AIDS and parental mortality and child safety in highly violent communities. Finally, the program is framed within a cultural context of constructing a "rondavel" or traditional hut common in many sub-Saharan African cultures. Based on Hanf's work on parent management training (Hanf 1969), program content focuses on building mud walls (i.e., positive parent-child relationships) before adding a thatch roof (i.e., limit-setting and nonviolent discipline strategies) to their "rondavel of support."

The parenting intervention was subsequently piloted in a randomized controlled trial ($n = 68$). Process evaluation measures included attendance registers, fidelity checklists derived from the newly developed parenting program manual activities, client satisfaction surveys, and qualitative focus groups with parents and community facilitators ($n = 8$). Findings demonstrated that the parenting intervention was feasible in active participation by low-income families (enrolled parents attended an average of 8.5 out of 12 sessions) and implementation fidelity by community facilitators (93.0 % of the manualized activities were delivered). Qualitative data also suggested that the cultural framing of intervention content was identified as a critical element in overcoming initial barriers to engagement and participation (Lachman et al. 2016a, b). Initial efficacy results showed medium intervention effects for parent-reported positive parenting as measured with the Parenting of Young Children Scale (McEachern et al. 2011) in comparison to controls ($d = 0.63$). Observational assessments also found significant intervention effects for frequency of child-led play ($d = 0.57$). The program manual was revised, and the content was strengthened; specifically, (1) sessions on nonviolent discipline were added and (2) a parent handbook was developed. A full-scale randomized controlled trial is currently taking place ($n = 296$ families).

In summary, this approach demonstrated the utility of using community-oriented tools to develop a parenting program that integrates evidence-based core components. The project was part of a larger research initiated by the World Health Organization and UNICEF called Parenting for Lifelong Health. This initiative is committed to developing evidence-based and affordable parenting programs to

prevent child maltreatment and improve child well-being in LMICs (Ward et al. 2014). As a result, all program materials were made freely available using Creative Commons copyright licensing that allows for free distribution of the program while restricting adaptation without the permission of the original authors.

Discussion

Research trying to identify how to offer culturally relevant and efficacious parenting interventions continues to evolve. By discussing three distinct examples, we make a case for acknowledging the complexities involved when attempting to reach diverse populations living in contrasting contexts in a culturally sensitive way. The three approaches discussed resulted in high rates of participant satisfaction with the interventions, high rates of engagement and retention, and positive effects on family well-being. The promising findings from the three case examples support the argument that responding in a culturally sensitive manner can be achieved successfully according to diverse approaches (Baumann et al. 2015). Thus, the process of cultural adaptation can be perceived as a continuum of possibilities ranging from few and targeted adaptations that entail minimal costs, to more comprehensive and expensive approaches (Castro et al. 2004).

Details about cultural adaptation as provided in Table 1 are often missing in publications. This might be in part because cultural adaptation often occurs without researchers or clinicians being fully aware of the process. Some authors have referred to this process as “in situ” or “in-vivo” modifications (Miller-Day et al. 2013; Moore et al. 2012). Future efforts could aim to develop user-friendly methods and instruments to record adaptations throughout intervention delivery.

In addition, journals often do not ask for detailed reporting of possible alterations of the original intervention. Although SPR guidelines recommend reporting implementation fidelity procedures to ensure adherence to original interventions and protocols (Gottfredson et al. 2015), there is no consensus on whether to—or how to—report types and procedures for cultural adaptation. These guidelines could be modeled on recommendations similar to the ones described in CONSORT (Schultz et al. 2010) and TREND (Fuller, Pearson, Peters, and Anderson 2012), which are international guidelines seeking to create uniformity in the reporting procedures of randomized and nonrandomized evaluations (Armstrong et al. 2008). The nonpharmacological extension of CONSORT suggests that authors should provide a “*description of the different components of the interventions and, when applicable, descriptions of the procedure for tailoring the interventions to individual participants*” (Boutron, Moher, Altman, Schulz, and Ravaud 2008). No further guidelines are provided in

CONSORT about which elements of cultural tailoring procedures should be discussed. Such guidelines can increase transparency and consistency in the reporting of cultural adaptations that currently tend to happen “in situ” and without systematic documentation.

Another critical issue in the context of cultural adaptations is that some interventions may be more flexible than others and may require less formal adaptations. More specifically, an alternative to adaptations (e.g., inbuilt *changes* to an intervention) might be to focus instead on sensitivity (e.g., inbuilt *flexibility* of an intervention). Thus, evidence-based interventions can have explicit inbuilt flexibility that allows both therapists and parents to adjust parenting techniques according to their specific cultural values and norms (e.g., Webster-Stratton 2009). Culturally sensitive interventions may be particularly versatile for diverse contexts and LMICs where families are experiencing continuous political, economic, and social transformation (Bonell, Fletcher, Morton, Lorenc, and Moore 2012).

Other important questions about the needs and effects of cultural adaptations remain unanswered. It would be interesting to explore the impact of different levels of cultural adaptation on intervention effectiveness (Castro et al. 2010). Although our case no. 2 is an example of such efforts, these types of studies are scarce, mainly because large dissemination of differently adapted versions requires substantial resources. A disagreement remains on whether comprehensive cultural adaptation processes are cost-effective and sustainable given the limited resources available for such procedures, especially in LMICs (Wainberg et al. 2007). There is still a need to develop models that are culturally sensitive but that are capable of achieving high implementation feasibility, and cost-effectiveness, particularly when considering dissemination in LMICs (Solomon, Card, and Malow 2006; Stanton 2005).

Concluding Remarks

We presented three case examples to show how different, and sometimes even contrasting, approaches to cultural adaptations can lead to effective parenting interventions that are well-received by diverse families. We highlighted the need for a more nuanced thinking about cultural adaptations, moving from a dichotomous “either-or” perspective to an inclusive “both-and” approach. We offered multiple ways to consider adaptation in an attempt to broaden this important discussion beyond the current thinking. Finally, we discussed the need for developing reporting guidelines to increase insight into the process of cultural adaptation and its effects on parenting intervention effectiveness.

Compliance with Ethical Standards The three case examples described in this paper received ethical clearance from the committee of the sponsor academic institution.

Disclosures of Conflict of Interest AM worked as a Postdoctoral Research Fellow from May 2016 until December 2016 at the Parenting and Family Support Centre (PFSC; University of Queensland), which receives royalties from the dissemination of the Triple P Positive Parenting Program around the world. She is not a member of staff at this institution anymore, is not a contributing author in any of the program variants and has never received any royalties from Triple P. JML is a co-developer of the Sinovuyo Caring Families Program. He is also the Executive Director of Clowns without Borders South Africa, the partner organization responsible for implementation of the program. PL and JRPC have no conflicts of interest to declare.

Informed consent Informed consent was collected from all participants in the three case examples.

References

- Achenbach, T. M. (2009). *The Achenbach system of empirically based assessment (ASEBA): Development, findings, theory, and applications*. Burlington: University of Vermont, Research Center for Children, Youth, and Families.
- Armstrong, R., Waters, E., Moore, L., Riggs, E., Cuervo, L. G., Lumbiganon, P., & Hawe, P. (2008). Improving the reporting of public health intervention research: Advancing TREND and CONSORT. *Journal of Public Health, 30*, 103–109.
- Barlow, J., Coren, E., & Stewart-Brown, S. (2002). Meta-analysis of the effectiveness of parenting programmes in improving maternal psychosocial health. *British Journal of General Practice, 52*, 223–233.
- Barlow, J., Smailagic, N., Ferriter, M., Bennett, C., & Jones, H. (2010). Group-based parent-training programmes for improving emotional and behavioural adjustment in children from birth to three years old. *Cochrane Database of Systematic Reviews, 3*, CD003680.
- Barrera, M., & Castro, F. G. (2006). A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science and Practice, 13*, 311–316.
- Baumann, A., Powell, B. J., Kohl, P. L., Tabak, R. G., Penalba, V., Proctor, E. E., & Cabassa, L. J. (2015). Cultural adaptation and implementation of evidence-based parent-training: A systematic review and critique of guiding evidence. *Children and Youth Services Review, 53*, 113–120.
- Benish, S. G., Quintana, S., & Wampold, B. E. (2011). Culturally adapted psychotherapy and the legitimacy of myth: A direct-comparison meta-analysis. *Journal of Counseling Psychology, 58*, 279.
- Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology, 23*, 67–82.
- Bernal, G., Jimenez-Chafey, M. I., & Domenech-Rodriguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology Research and Practice, 40*, 361–368.
- Bonell, C., Fletcher, A., Morton, M., Lorenc, T., & Moore, L. (2012). Realist randomised controlled trials: A new approach to evaluating complex public health interventions. *Social Science and Medicine, 75*, 2299–2306.
- Boutron, I., Moher, D., Altman, D. G., Schulz, K. F., & Ravaud, P. (2008). Extending the CONSORT statement to randomized trials of nonpharmacologic treatment: explanation and elaboration. *Annals of Internal Medicine, 148*, 295–309.
- Castro, F., Barrera, M., & Martinez, C. (2004). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science, 5*, 41–45.
- Castro, F. G., Barrera, M., & Holleran Steiker, L. K. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology, 6*, 213–239.
- Chambless, D., & Ollendick, T. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology, 52*, 685–716.
- Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Identifying and selecting the common elements of evidence based interventions: A distillation and matching model. *Mental Health Services Research, 7*, 5–20.
- Collins, P. Y., Patel, V., Joestl, S. S., March, D., Insel, T. R., & Daar, A. S. (2011). Grand challenges in global mental health. *Nature, 475*, 27–30.
- Domenech-Rodriguez, M. M., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence-based intervention: From theory to practice in Latino/a community context. *American Journal of Community Psychology, 47*, 170–186.
- Elliott, D. S., & Mihalic, S. (2004). Issues in disseminating and replicating effective prevention programs. *Prevention Science, 5*, 47–53.
- Eyberg, S. M., & Pincus, D. (1999). *Eyberg child behaviour inventory and Sutter-Eyberg student behaviour inventory-revised: Professional manual*. Florida: Psychological Assessment Resources.
- Forgatch, M. S., Patterson, G. R., DeGarmo, D. S., & Beldavs, Z. G. (2009). Testing the Oregon delinquency model with 9-year follow-up of the Oregon divorce study. *Development and Psychopathology, 21*, 637–660.
- Fraenkel, P. (2006). Engaging families as experts: Collaborative family program development. *Family Process, 45*, 237–257.
- Fuller, T., Pearson, M., Peters, J. L., & Anderson, R. (2012). Evaluating the impact and use of Transparent Reporting of Evaluations with Non-randomized Designs (TREND) reporting guidelines. *British Medical Journal, 2*, e002073.
- Gardner, F., Montgomery, P., & Knerr, W. (2015). Transporting evidence-based parenting programs for child problem behavior (age 3–10) between countries: Systematic review and meta-analysis. *Journal of Clinical Child and Adolescent Psychology*.
- Gottfredson, D. C., Cook, T. D., Gardner, F. E., Gorman-Smith, D., Howe, G. W., Sandler, I. N., & Zafft, K. M. (2015). Standards of evidence for efficacy, effectiveness, and scale-up research in prevention science: Next generation. *Prevention Science, 16*, 893–926.
- Griner, D., & Smith, T. B. (2006). Culturally adapted mental health interventions: A meta-analytic review. *Psychotherapy: Theory, Research, Practice, Training, 43*, 531–548.
- Hanf, C. (1969). *A two-stage program for modifying maternal controlling during mother-child (M-C) interaction*. Vancouver: Paper presented at the Paper presented at the meeting of the Western Psychological Association.
- Hawkins, J. D., Jenson, J. M., Catalano, R. F., Fraser, M. W., Botvin, G. J., Shapiro, V., & Stone, S. (2015). *Unleashing the power of prevention*. Washington: Discussion Paper, Institute of Medicine and National Research Council.
- Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington: Institute of Medicine.
- Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low- and middle-income countries: A systematic review. *Prevention Science, 14*, 352–363.
- Lachman, J. M., Sherr, L., Cluver, L., Ward, C. L., Hutchings, J., & Gardner, F. (2016a). Integrating evidence and context to develop a parenting program for low-income families in South Africa. *Journal of Child and Family Studies, 1–16*. doi: 10.1007/s10826-016-0389-6

- Lachman, J. M., Cluver, L., Kelly, J., Ward, C. L., Hutchings, J., & Gardner, F. (2016b). Process evaluation of a parenting program for low-income families in South Africa. *Research on Social Work Practice*. doi:10.1177/1049731516645665.
- Matos, M., Bauermeister, J. J., & Bernal, G. (2009). Parent-child interaction therapy for Puerto Rican preschool children with ADHD and behavior problems: A pilot efficacy study. *Family Process*, 48, 232–252.
- McEachern, A., Dishion, T., Weaver, C., Shaw, D., Wilson, M., & Gardner, F. (2011). Parenting Young Children (PARYC): Validation of a self-report parenting measure. *Journal of Child and Family Studies*, 21, 498–511.
- Mejia, A., Calam, R., & Sanders, M. R. (2012). A review of parenting programs in developing countries: Opportunities and challenges for preventing emotional and behavioral difficulties in children. *Clinical Child and Family Psychology Review*, 15, 163–175. doi:10.1007/s10567-012-0116-9
- Mejia, A., Calam, R., & Sanders, M. R. (2014a). Examining delivery preferences and cultural relevance of an evidence-based parenting program in a low-resource setting of Central America: Approaching parents as consumers. *Journal of Child and Family Studies*, 24, 1004–1015.
- Mejia, A., Calam, R., & Sanders, M. R. (2014b). Examining the fit of evidence-based parenting programs in low-resource settings: A survey of practitioners in Panama. *Journal of Child and Family Studies*, 24, 2262–2269.
- Mejia, A., Calam, R., & Sanders, M. R. (2015). A pilot randomized controlled trial of a brief parenting intervention in low resource settings in Panama. *Prevention Science*, 16, 707–717.
- Metzler, C. W., Sanders, M. R., Rusby, J. C., & Crowley, R. (2011). Using consumer preference information to increase the reach and impact of media-based parenting interventions in a public health approach to parenting support. *Behavior Therapy*, 43, 257–270.
- Mikton, C. (2012). Two challenges to importing evidence-based child maltreatment prevention programs developed in high-income countries to low- and middle-income countries: Generalizability and affordability. In H. Dubowitz (Ed.), *World perspectives on child abuse* (Vol. 10, p. 97). Aurora: International Society for the Prevention of Child Abuse and Neglect.
- Miller-Day, M., Pettigrew, J., Hecht, M. L., Shin, Y., Graham, J., & Krieger, J. (2013). How prevention curricula are taught under real-world conditions: Types of and reasons for teacher curriculum adaptations. *Health Education*, 113, 324–344.
- Moore, J. E., Bumbarger, B. K., & Rhoades, B. (2012). Examining adaptations of evidence-based programs in natural contexts. *Journal of Primary Prevention*, 34, 147–161.
- Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of Triple P Positive Parenting Program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review*, 11, 114–144.
- Parra Cardona, J. R., Domenech-Rodríguez, M., Forgatch, M., Sullivan, C., Bybee, D., Holtrop, K., & Bernal, G. (2012). Culturally adapting an evidence-based parenting intervention for Latino immigrants: The need to integrate fidelity and cultural relevance. *Family Process*, 51, 56–72.
- Parra-Cardona, J. R., Holtrop, K., Córdova, D., Escobar-Chew, A. R., Tams, L., Horsford, S., & Fitzgerald, H. E. (2009). “Queremos Aprender”: Latino immigrants call to integrate cultural adaptation with best practice knowledge in a parenting intervention. *Family Process*, 48, 211–231.
- Parra-Cardona, J.R., Bybee, D., Sullivan, C.M., Domenech Rodríguez, M., & Bernal, G. (2015). A randomized controlled trial with two differentially culturally adapted PT interventions for underserved Latino/a immigrants: Examining intervention outcomes according to level of adaptation. Manuscript under review.
- Patel, V., & Prince, M. (2010). Global mental health: A new global health field comes of age. *Journal of the American Medical Association*, 303, 1976–1977.
- Resnicow, K., Soler, R., Braithwait, R. L., Ahluwalia, J. S., & Butler, J. (2000). Cultural sensitivity in substance abuse prevention. *Journal of Community Psychology*, 28, 271–290.
- Sanders, M. (2012). Development, evaluation, and multinational dissemination of the Triple P Positive Parenting Program. *Annual Review of Clinical Psychology*, 8, 345–379.
- Schultz, K. F., Altman, D. G., & Moher, D. (2010). CONSORT 2010 Statement: Updated guidelines for reporting parallel group randomized trials. *British Medical Journal*, 340, c332.
- Snell-Johns, J., Mendez, J. L., & Smith, B. (2004). Evidence-based solutions for overcoming access barriers, decreasing attrition, and promoting change with underserved families. *Journal of Family Psychology*, 18, 19–35.
- Solomon, Y., Card, J. J., & Malow, R. M. (2006). Adapting efficacious interventions—Advancing translational research in HIV prevention. *Evaluation & the Health Professions*, 29, 162–194.
- Stanton, B. E. A. (2005). The complex business of adapting effective interventions to new populations: An urban to rural transfer. *Journal of Adolescent Health*, 37, 163.
- Sundell, K., Beelmann, A., Hasson, H., & von Thiele Schwarz, U. (2015). Novel programs, international adaptations, or contextual adaptations? Meta-analytic results from German and Swedish intervention research. *Journal of Clinical Child & Adolescent Psychology*. Advance publication online.
- Updegraff, K. A., & Umaña-Taylor, A. J. (2015). What can we learn from the study of Mexican-origin families in the United States? *Family Process*, 54, 205–216.
- Wainberg, M. L., McKinnon, K., Mattos, P. E., Pinto, D., Mann, C. G., de Oliveira, C., & SPRISSMA Project. (2007). A model for adapting evidence-based behavioral interventions to a new culture: HIV prevention for psychiatric patients in Rio de Janeiro, Brazil. *AIDS and Behavior*, 11, 872–883.
- Ward, C. L., Mikton, C., Cluver, L., Cooper, P., Gardner, F., Hutchings, J., Wessels, I. M. (2014). Parenting for lifelong health: From South Africa to other low-and middle-income countries. *Early Childhood Matters: Responsive Parenting: A Strategy to Prevent Violence*, 49.
- Ward, C., Sanders, M. R., Gardner, F., Mikton, C., & Dawes, A. (2016). Preventing child maltreatment in low- and middle-income countries. *Child Abuse & Neglect*.
- Webster-Stratton, C. (2001). *The incredible years: Parents, teachers, and children training series*. Seattle: Leader’s Guide.
- Webster-Stratton, C. (2009). Affirming diversity: Multi-cultural collaboration to deliver the incredible years parent programs. *International Journal of Child Health and Human Development*, 2, 17–32.
- Wessels, I., & Ward, C. L. (2015). A ‘best buy’ for violence prevention: Evaluating parenting skills programmes. *South African Crime Quarterly*, 54, 17–28. doi:10.4314/sacq.v54i1.2.