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Cultural Adaptations: Conceptual, Ethical, Contextual, and Methodological Issues for Working with Ethnocultural and Majority-World Populations

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Abstract Mayor advancements have been achieved in research on the cultural adaptation of prevention and treatment interventions that are conducted with diverse ethnocultural groups. This commentary addresses conceptual, ethical, contextual, and methodological issues related to cultural adaptations. The articles in this special issue represent a major contribution to the study of cultural adaptations in prevention science. We frame our analysis of fidelity to core intervention components using a conceptual approach that examines (a) the propositional model (theory of change), (b) the procedural model (theory of action, methods), and (c) the philosophical assumptions that undergird these models. Regarding ethics, we caution against imposing the norms, values, and world views of the Western dominant society onto vulnerable populations such as ethnocultural groups. Given that the assumption of universality in behavioral science has been questioned, and as randomized clinical trials (RCTs) seldom examine the ecological validity of evidence-based interventions and treatments (EBI/T), imposing such interventions onto ethnocultural groups is problematic since these interventions contain values, norms, beliefs, and worldviews that may be contrary to those held by many ethnocultural groups. Regarding methods, several innovative designs are discussed that serve as alternatives to the RCT and represent an important contribution to prevention science. Also, we discuss guidelines for conducting cultural adaptations. Finally, the articles in this special issue make a major contribution to the growing field of cultural adaptation of preventive interventions with ethnocultural groups and majority-world populations.

Keywords Cultural adaptations · Ethnocultural groups · Intervention science · Treatment research · Ethnic minorities · Ethics · Methodology

Cultural adaptations of prevention and treatment interventions appear to be coming of age. In fact, cultural adaptations may represent an emerging area or intervention research in a society increasingly characterized by racial, ethnic, and linguistic diversity. Adaptations to culture and context are part of a relatively new area of inquiry—multiculturalism—described by some as the Forth Force in Psychology (Pedersen 2013; Sue 1996). A review of citations on "cultural adaptation" in either the Google Scholar or PsycINFO search engines show a notable increase in articles and documents over time. In Google Scholar, there were 6100 documents identified between 1990 and 1999. From the year 2010 to the present, 23,900 documents were identified, representing a 291.8% increase in less than two decades. Yet, Google tends to cast a wide net identifying documents from many fields. By contrast, PsycINFO focuses primarily on psychological documents. With the PsycINFO database, in the decade of 1990–1999, 121 articles were identified with cultural adaptation and from the year 2010 to the present, there were 1044 papers representing a 792.8% increase in papers, articles, and documents on this topic. It appears that cultural adaptations might be here to stay.

The articles of this special section of *Prevention Science* make a major contribution to the understanding of key issues in cultural adaptations. A range of critical topics are discussed

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such as local adaptations, engagement, and sustainability of evidence-based interventions (EBIs) (Barrera et al. 2016); the challenges of implementation of culturally adapted family EBIs with diverse populations (Kumpfer et al. 2016); useful case examples that contrast different approaches in the cultural adaptation of parenting interventions (Mejia et al. 2016); using culture as a central principle for providing access to effective EBIs embedded in the school context (Dawson-McClure et al. 2016); and lastly, the limits of using randomized clinical trial (RCT) methods along with a proposal of alternative methodologies that may well advance prevention science and research on cultural adaptations in ethnocultural communities (Henry et al. 2016). As a whole, these articles serve as exemplars in our field and are a welcomed addition to the development of an agenda on cultural adaptations of EBIs for ethnocultural groups in the USA (Cardemil 2010; Domenech Rodríguez and Bernal 2012; Lau et al. 2016).

In this commentary, we will address conceptual, ethical, contextual, and methodological issues, as well as an update on the most recent evidence of culturally adapting both prevention and treatment interventions. As Barrera et al. (2016) points out, we have witnessed major advancements in the cultural adaptation of treatment and preventive interventions. Also, there is evidence to "guide changes to EBI methods and content without disturbing core intervention components" (pg. 1). These authors suggest that core program elements need to be implemented with a high degree of fidelity to the original EBI with cultural adaptations made only as additions to the core components. Herein lies a key concern that is both conceptual and methodological. What does it mean to not disturb the "core components" of an intervention? Or to adapt or make changes so long as such changes operate as an addition and do not tinker with the core components? The mantra in the prevention literature has been that these components are sacrosanct. Yet, where is the evidence that these components cannot be modified? Is the sequencing of the components critical? Has the specific sequence of components been tested? What criteria should be used to determine what is additive and what is not? As Flannery et al. (2016) note, research is limited in decomposing specific elements of universal prevention programs. Similarly, Blase and Fixsen (2013, p. 6) point out "that there is little empirical evidence to support assertions that the components named by an evidence-based program developer are, in fact, the functional or only functional core components necessary for producing the outcomes" (Pg. 6). Thus, the evidence on the "functional" or essential components linked to change is limited.

A Conceptual Approach to Fidelity and Fit

A conceptual approach to understanding interventions appears in Fig. 1. We propose that any treatment or intervention has at least three major elements: the propositional model (i.e., theory of change), the procedural model (i.e., steps, stages, procedures for change to occur), and the underlying philosophical assumptions (i.e., ontology, cosmology, epistemology of assumptive world or worldviews) (Bernal 2008; Ford and Urban 1998). Incidentally, another helpful model-driven approach was proposed by Barrera and Castro (2006). The elements of our conceptual approach expand our original ecological validity model for cultural adaptations (Bernal et al. 1995). On the left side of Fig. 1, the propositional and procedural models are nested within the philosophical assumptions as these assumptions undergird both models. On the right side of Fig. 1, two columns appear with the propositional, procedural, and the philosophical assumptions placed at the bottom to represent the underlying worldviews for population groups A and B. Culturally adapting an intervention or treatment entails examining these three broad categories to produce the best fit between a treatment developed in one context and with a generally homogenous group (e.g., middle-high SES, white, well educated, verbal, English-speaking) and is implemented with a second group (e.g., low SES, non-white, less educated, verbal, bilingual or non-English-speaking, etc.) to produce the best fit by taking into consideration language, culture, and context. As we have suggested elsewhere, this process needs to be systematic and should occur prior to the delivery of the intervention/treatment (Bernal et al. 2009).

The conceptual approach to fidelity and fit is useful when considering the "goodness of fit" to a protocol as Hall and Ibaraki (2015) frame the process. Thus, if changes are made to the intervention in such a way that the propositional model of a treatment/intervention is modified, then we have a different intervention altogether. For example, in CBT, the basic proposition is that stressful events activate negative cognitive schemes that in turn produce symptoms such as depression. If this thesis is modified, in whatever way, then we are distorting the theory of change and therefore a different kind of intervention with perhaps a different set of mediators(s) is being delivered. A modification of a protocol at the level of the propositional model that may or may not be beneficial to participants violates the integrity of the intervention and would not hold fidelity to the original treatment model because a fundamental conceptual aspect of the intervention has been changed.

However, a change to the procedural model constitutes a problem of a different order. For example, one model of CBT derived from the early coping with depression course (Cuijpers et al. 2009) typically uses three components (cognitive, behavioral, and interpersonal) as part of the intervention or treatment (Muñoz and Mendelson 2005; Rosselló et al. 2012). While the suggested sequence for these components is to begin with the cognitive part, and subsequently continue with the behavioral and interpersonal modules, the sequencing of these components could be altered. In fact, patients could be offered the choice of deciding with which module to begin

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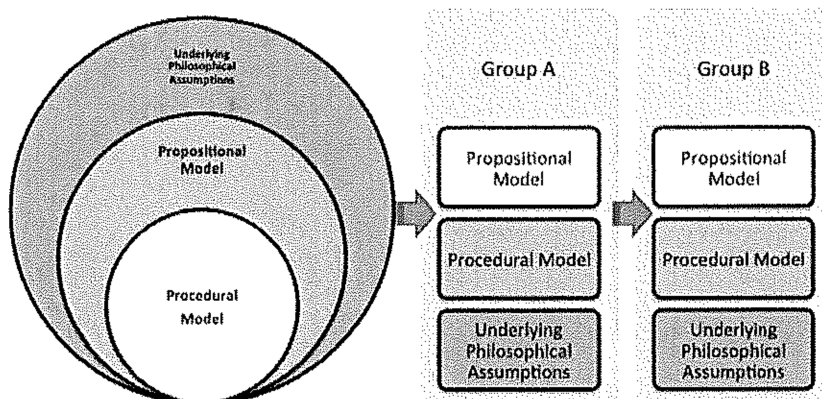

Fig. 1 Conceptual approach to fidelity and fit between model and cultural groups based on Ford and Urban (1998) and Bernal (2008)

the treatment. The point here is that changes in the sequencing or even changes that "add" new elements to the intervention are unlikely to alter the integrity of the treatment. Thus, while changes to the propositional model are unacceptable, changes to the procedural model are unlikely to be problematic.

In Mejia et al. (2016), the second case study presents two levels of cultural adaptations, with deep structural adaptations (Parra-Cardona et al. 2017) to the parent management training —The Oregon Model (PMTO^{R}). These interventions are the *Criando con Amor, Promoviendo Armonía y Superación* (CAPAS) and the CAPAS-Enhanced (CE). CAPAS was adapted taking into consideration the dimensions of language, persons, metaphors, content, goals, context, and methods. The CE built upon CAPAS making additional cultural modifications to the protocol. In both interventions, the core concepts of PMTO^{R} (i.e., reducing coercive interpersonal processes) were not changed, except in the way the intervention was delivered making accommodations to the population, in this case low-income Latino/a immigrants living in Detroit, Michigan. For example, CE was expanded according to salient immigration and cultural experiences that were reported by the targeted population. Also, each core PMTO component throughout was introduced according to immigration and culturally focused reflections that were informed by findings from a previous qualitative study (Mejia et al. 2016).

Turning to the underlying philosophical assumptions of intervention/treatment approaches, the concern here lies in the assumption about ontology or the way one views nature or reality. Continuing with the CBT example, ontology can be framed as how one understands existence or the nature of being. Thus, traditional CBT may be described as based on interactive dualism because it defines existence as an interaction between the mind-body with the material world; the cosmology, or how one envisions the universe, for CBT, it may be described as mechanistic in that there is a stimulus-organism-response relationship that is essentially deterministic following linear causality; this means that in the CBT world view, learning, cognitions, and the system of reinforcement are presumed to determine behavior. The logic is based on linear causality and its epistemology or how we know things is grounded on observed reality (Bernal 2008).

There are other worldviews to consider that are shared by ethnocultural groups such as African-Americans, Asian-Americans, Latinos/as, and American Indians. For many ethnocultural groups, the worldview is more idealistic than materialistic. The cosmology is organismic rather than deterministic, and the logic may well be non-linear or dialectical. Thus, at the level of the philosophical assumptions that undergird conventional EBI/Ts, it may be that there are disjunctions between the intervention protocol and the worldview of the target population. Indeed, the very concept of the self, so often used in intervention science, may need to be culturally adapted for some ethnocultural groups. A case in point being the Native American concept of self (or self-concept, self-efficacy, etc.) that has been described as centered on the notion of the Spirit first and nested within concentric rings that entail the environment, the tribe, the family, and the most distal ring being the person (Manson 1996; Manson et al. 1996); these notions of the self are in contraposition to individual-centered Western notions of the self where the person is at the center. Similarly, Latinos/as are described in the literature as having a sense of self as more interpersonal or oriented toward the family (Sabogal et al. 1987; Triandis 2001). Wade Nobles describes the Afro-centered sense of self as an extended self or a self-concept centered on "we" (Noble 2015). And of course, the mindfulness approach to treatments/interventions and Zen views of the self are focused on the moment to moment experience of the here and now with the ultimate goal of undoing or dissolving the self (Marchand 2012; Odin 1996). These are only a few examples of the importance of appreciating the philosophical assumptions that may be embedded in concepts and constructs of the treatments/interventions being adapted for ethnocultural groups.

A challenge in conducting cultural adaptations in multicultural contexts is the diversity in race, language, ethnicity, and culture on the one hand, and on the other, the increased complexity when ethnocultural groups within a race or ethnic group have widely different experiences. Within the same

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ethnic or racial group, some participants may prefer a more "indigenous" approach while others may find a Westernized approach acceptable. Ramírez (1999) described two competing worldviews: one being more traditional, hierarchical, religious, family-community oriented and the other as modern, westernized, linear, and individually oriented. With the notion of "cognitive flex," the bicultural alternative is considered, namely, the combination or integration of both belief systems or the ability to move in and out of traditional and nontraditional settings and being able to function well in both non-English and non-English-speaking contexts. Indeed, fully bilingual and bicultural participants may have the capacity to handle seemingly competing worldviews. Thus, understanding the underlying philosophical assumptions and worldviews of the target population is helpful in tailoring interventions that will be acceptable and beneficial when worldviews and the assumptions that undergird these views are considered.

Ethics and Cultural Adaptation

In his multicultural critique of psychotherapy and EBI/Ts, Gone (2009) alerted the field to the risks of employing interventions imbedded with values, norms, beliefs, and worldviews that are an integral part of such treatments and may be contrary to the worldviews of ethnocultural groups. Intentionally or not, such practices may promote the socialization of values, norms, and expectations from the dominant culture in participants or patients from ethnocultural groups through an "intervention" that may be laden with and promote predominant cultural norms. In other words, "by virtue of their own cultural assumptions and expectations, these interventions may well purchase amelioration of symptoms or improvement in functioning at the expense of tacit Western cultural assimilation" (Gone, 2009, p. 760).

Three ethical dimensions of multicultural sensitive research have been identified (Trimble et al. 2010) that can inform intervention and treatment research. First is the identification of applying a cultural view or perspective to evaluating the risks and benefits of an intervention. Second is an approach that provides respectful and culturally informed consent procedures regarding confidentiality. And third is the use of what has been termed "principled cultural sensitivity" (Trickett and Birman 1989; Trickett et al. 1985; cited in Trimble et al. 2010). The basic notion is to protect the person's rights from treatments or interventions that intrude or disrupt cultural norms and values. The practical implication here is to inform potential participants of research studies as well as clinical practice of the values and norms that are implicit in treatments/interventions that are to be delivered. The principle of cultural sensitivity is a logical derivative of an ecological approach that values history, culture, and context such that interventions and treatments can become resources for the community.

The USA has had a tradition of welcoming immigrants and is, in fact, a nation of immigrants apart from the American Indian population that are native to North, Central, and South America. While some ethnocultural groups share the experience of migration, despite their recent demonization (Nill 2011), there are important shared legacies related to oppression, genocide, slavery, conquest, and colonization (Bernal et al. 2003). The counterpoint to these legacies are experiences of resistance, survival, and resiliency, despite the challenges faced by ethnocultural groups that have been subjected to oppression through the practice of genocide as in the case of American Indians, slavery with African Americans, conquest, subordination, and defeat with Mexican Americans and Puerto Ricans. An understanding of these legacies and their consideration in a treatment/intervention protocol is both an ethical mandate and one that may well be central to both engagement and positive outcome in therapy.

An example of how culture was integrated as part of a prevention intervention was in the Familias Unidas project (Dawson-McClure et al. 2016). The study was on Latino immigrant parents and the intervention was delivered in a multicultural context. The approach was to work in tandem with Latino cultural values such that parents were supported in their position of authority and respect to strengthen "pan-Hispanic values, such as primacy of family, sanctity of parental authority, and roles of parents as the family's leaders and educators" (pg. 11). Similarly, in a case described by Mejia et al. (2016), two different culturally adapted versions of the parent management training—Oregon Model (PMTO[R]) were studied. At one point, the authors indicated that parents were asked to identify stressors related to immigration that included discrimination at work that may have led to greater risk of accumulated frustration leading to punitive practices with their children; this seemingly innocuous question is an important acknowledgement of both legacy and context. Given the timeline of the study and the context (Detroit area), it is quite likely that Immigration Customs Enforcement (ICE) raids were occurring and some of these families were probably targeted or had community members who were subjected to these raids. Focusing on the context and focusing on immigration as a stressor on parental practices is an acknowledgment of the real dangers in which many immigrant families live and is an important recognition of both their legacy and context.

Universality of Evidence-Based Interventions and Treatments

Regarding cultural adaptations of EBI/Ts, the usual approach to determine if an adaptation is needed that follows the

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tradition of considering the null hypothesis based on the absence of differences between groups. As Cardemil (2010) points out, this approach is inadequate due to the lack of well-powered studies to answer the question of generalizability to ethnocultural groups. As Cardemil notes, "the assumption cannot be that efforts to adapt treatments for particular cultural groups should proceed only when data emerge demonstrating differences in treatment efficacy across groups" (Cardemil 2010, p. 10). Because efficacy trials generally do not examine the acceptability of treatments delivered to specific population groups, their results as transferred from one population and context to ethnocultural groups have been critiqued (Bernal and Scharró-del-Río 2001; Cardemil 2010; Lau et al. 2016). Thus, assuming a position of uncertainty regarding the assumption of universality is probably the wise approach with new EBT/Is when attempting to transport these protocols to ethnocultural groups within the USA and to populations in other countries that do not share the dominant values, norms, and culture of the West.

With cultural adaptations, one inevitably faces the conundrum of the apparent universality of psychological science vis-à-vis local conditions given the diversity of populations and contexts. While our theories strive for universality and generalization, to what extent are the theories and research from behavioral sciences validated outside their original context? The tension here is between the local cultural context of production and the standardization and marketing of EBI/Ts to global communities. As Kuukkanen (2011) notes, while the standardization and theories of delocalization may explain the internationalization of science, localism (i.e., the local context for adaptations) denies their universality.

Indeed, the global validity of psychological knowledge is questionable. Christopher et al. (2014) note that by utilizing interventions without the awareness of culture and context, psychologists risk imposing assumptions, concepts, and practices on ethnocultural groups where they do not fit. While there is no consensus on the definition of culture (Betancourt and López 1993), generally, it may be considered as a constellation of meanings that constitute a way of life and that inevitably shape every psychology (Christopher et al. 2014). Culture can also be understood as a variable system of meaning, learned and shared by people or an identifiable part of a population (Betancourt and López 1993; Rohner 1984 cited in Betancourt and López 1993). Thus, the very idea of "universality" or global validity in behavioral research is questionable. Published claims on the universality of research are unwarranted from the results of studies that use samples exclusively from what has been termed as Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies and that assume almost no variance in human populations (Henrich et al. 2010). As these authors show, the overwhelming majority of the research is conducted with samples that represented 12% of the world's population. Also, the samples were drawn mainly from the same universities as that of the first author of which 73% were from universities in the USA (Henrich et al. 2010). Clearly, such research is contextually situated and has, at best, limited generalization to majority-world populations. Parenthetically, according to Adair (2005), the term "majority world" was coined by Cigdem Kagitcibasi, a Turkish cross-cultural investigator. The term is considered less pejorative for countries that are often referred to as Third World, developing, or low-income. The term majority world is more descriptive in that it accounts for the overwhelming majority of the global population.

The dominance of Western psychology in theory and practice is well established (Adair et al. 1993; Berry 2013; Moghaddam et al. 2007). The dialectic between the dominance of psychology from the West and the rise of regional and indigenous psychologies that challenged theories, constructs, and approaches that disregard or omitted culture and context is on the rise. Critiques of universalism are based on the disproportionate amount of theories, concepts, methods, and findings with little room for alternative conceptualizations to dominant approaches that appeared to ignore or minimize the role of cultures and contexts. With the rise of multiculturalism, we are hopeful that the intersection shared between the West, Regional, and Indigenous psychologies will expand, setting the stage for a global psychology that generates psychological knowledge (Bernal et al. 2017; Berry 2016) that may be both universal and grounded in its ecological, social, economic, cultural, and historical contexts.

Methodological Issues and Guidelines for Cultural Adaptations

Henry et al. (2016) present a set of viable alternatives to the challenges of traditional methods for establishing internal validity of preventive interventions, namely, the randomized control trial (RCT), the gold standard for establishing internal validity. The authors discuss alternative designs that represent a major contribution to the field. Certainly, proving the counter factual, that is, that something that did not occur was a result of an intervention is not an easy endeavor, particularly when attempting to engage communities in research studies. While RCTs remain the gold standard for establishing internal validity, it is not always possible to meet all the requirements and assumptions of RCTs when working with ethnocultural groups. Useful alternative methods are described and presented. These include (a) regression discontinuity design, where the impact of the intervention can be identified by differences in outcome at a naturally occurring cut-off point on risk; (b) interrupted time series design that entail repeated baseline measures prior to and following the intervention to demonstrate the impact of exposure; and (c) matched group design. In addition, roll-out designs are considered a variant of a

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waitlist design where some participants are exposed to the intervention while others remain on a waitlist, also staggering the exposure in such a way to establish a pre and post measure to track the effects of the intervention (Henry et al. 2016).

Another important feature of this article was the acknowledgement by the authors of the limits of the RCT design in working with ethnocultural communities that would consider the methods and procedures as "impractical, culturally unacceptable, or ethically questionable, as can occur with community-based efforts focused on inner-city neighborhoods or rural American Indian/Alaska Native communities" (Henry et al. 2016, p. 6). In sum, this article is an indispensable resource for anyone interested in alternative methodologies for conducting prevention science.

Another methodological issue concerns the methods and procedures used in cultural adaptations. While there are many frameworks and models published (Domenech Rodríguez and Bernal 2012), to date, there is no consensus on steps that need to be followed. Guidelines for cultural adaptations complement conceptual frameworks and offer specific procedures to follow. For example, Kumpfer et al. (2016) and Barrera et al. (2016) discuss the importance of guidelines. The recommendations given by Kumpfer et al. (2016) as outlined on their paper are based on the ones made by the United Nations Office of Drugs and Crimes (UNODC) specifically for culturally adapting Family Evidence-Based Interventions (FEBIs). Barrera et al. (2016) recommendations focus on local adaptations, promoting engagement and increasing sustainability. For example, Barrera et al. (2016) argue that since core components must be preserved while adding components to increase cultural fit, it could lead to longer not briefer interventions. However, as noted earlier, the evidence that these components cannot be modified is limited and it is not at all clear if the so called "core" components are indispensable in the absence of the conceptual analysis presented above. The question at hand is if the propositional model or the candidate mechanism of action is embedded within the core component. Finally, Henry et al. (2016) offer useful recommendations and guidelines on viable alternatives to the RCT in prevention science.

Clearly, a wide range of methods are available to study the impact of EBI/Ts. Both RCTs and the alternatives to the RCTs are important resources that can advance our knowledge base on whether and how interventions and treatments work. As Kumpfer et al. (2016) notes, despite the health benefits and marked reductions in health care costs, "few government agencies have been willing to invest in RCTs of culturally adapted versions of existing FEBIs needed to get them listed as EBIs on Websites" (p. 3).

Another methodological challenge concerns the availability of guidelines and procedures that can guide investigators and clinicians on how to conduct adaptations. Part of the challenge is that journal editors too frequently do not request details of changes to the original EBI/T probably due to the cost of journal pages or even details on the demographics of race, ethnicity, nationality, etc. With such limited information, there are no reporting standards for the field on procedures and guidelines on cultural adaptations. As Mejia et al. (2016) suggest, we should make concerted efforts á la "CONSORT and TREND which are international guidelines seeking to create uniformity in the reporting procedures of randomized and nonrandomized evaluations" (p. 8). Both CONSORT and TREND are invaluable resources to the field (CONSORT 2017; Des Jarlais 2014).

Domenech Rodríguez and Bernal (2012) published guidelines for determining when to culturally adapt. First, one should identify if there are EBT/Is for the presenting problem and if these are accessible to treatment providers. Also, an assessment needs to be conducted to determine if the EBT/I targets the appropriate mechanisms for positive outcomes in the population of interest. The next step should be to see if the candidate EBT/I is an acceptable treatment for the ethnocultural group (social validity). A summary of the recommended general and specific guidelines for cultural adaptation is listed in Table 1.

Summary and Conclusion

Cultural adaptations of EBI/Ts have come a long way in a relative short time frame. The articles of this special section of *Prevention Science* represent a major contribution to a growing literature on the cultural adaptation of preventive interventions to ethnocultural groups. These articles are a welcomed contribution to the growing literature on the prevention and treatment field.

Table 1 Cultural Adaptation Guidelines

I. General guidelines
1.Use a conceptual adaptation framework to identify key elements in the adaptation
2.Carefully document all adaptations
3.Evaluate outcomes of the culturally adapted evidence-based treatment
4.Evaluate the integrity of the original treatment model vis-à-vis the adapted version
5.Reevaluate outcomes of the refined adapted evidence-based treatment
II. Specific guidelines
1.Involve the target population in the process of developing the adaptation contents and activities
2.Involve treatment providers who are knowledgeable about the target population
3.Planning the adaptation of the treatment or intervention
4.A preliminary pilot study on the acceptability and feasibility of the treatment intervention
5.Reviews of the literature on issues, themes, constructs and barriers to treatment with the population
6.Consider specific details of delivery

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There now exist two books on cultural adaptations (Bernal and Domenech Rodríguez 2012; Rathod et al. 2015), a special issue on the cultural adaptation using single case studies oriented toward practitioners (Koslofsky and Domenech Rodríguez 2017), and there are now seven meta-analyses that evaluate the effects of cultural adaptations (Benish et al. 2011; Griner and Smith 2006; Hall et al. 2016; Huey and Polo 2008; Smith et al. 2011; Timothy B. Smith and Trimble 2016; van Loon et al. 2013). The results from the meta analyses show that the effect sizes range from a low of 0.38 to a high of 1.06, and average Cohen's *d* of 0.56, suggesting a moderate effect in favor of cultural adaptations. Finally, the growing field of cultural adaptations of EBI/Ts would benefit greatly if we follow the path of the Consolidates Standards of Reporting Clinical Trials—CONSORT and the Transparent Reporting of Evaluations with Nonrandomized Design (Trend).

Compliance with Ethical Standards

Funding Not applicable as there was no funding for this commentary.

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval Approval from an IRB was not required as the commentary did not include human participants. Nevertheless, the issue of ethics in research was addressed in the commentary.

Informed Consent There were no human participants in the study; thus, informed consent was not applicable.

References

Adair, J. (2005). An introduction to the special issue: Social psychology around the world: Origins and subsequent development. *International Journal of Psychology, 40*, 209–212.

Adair, J., Puhan, B. N., & Vohra, N. (1993). Indigenization of psychology: Empirical assessment of progress in Indian research. *International Journal of Psychology, 28*, 149–169.

Barrera, M., & Castro, F. G. (2006). A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science and Practice, 13*, 311–316.

Barrera, M., Berkel, C., & Castro, F. G. (2016). Directions for the advancement of culturally adapted preventive interventions: Local adaptations, engagement, and sustainability. *Prevention Science*, 1–9.

Benish, S.G., Quintana, S., & Wampold, B.E. (2011). Culturally adapted psychotherapy and the legitimacy of myth: a direct-comparison meta-analysis: American Psychological Association.

Bernal, G. (2008). Acercamiento comparativo a las teorías de psicoterapia [a comparative approach to theories of psychotherapy]. In G. Bernal & A. Martínez-Taboas (Eds.), *Teoría y práctica de la psicoterapia en Puerto Rico [theory and practice of psychotherapy in Puerto Rico]* (pp. 8–35). Hato Rey: Publicaciones Puertorriqueñas.

Bernal, G., & Domenech Rodríguez, M. M. (2012). Cultural adaptation in context: Psychotherapy as a historical account of adaptations. In G. Bernal & M. M. Domenech Rodríguez (Eds.), *Cultural adaptations: Tools for evidence-based practice with diverse populations* (pp. 3–22). Washington, DC: American Psychological Association.

Bernal, G., & Scharró-del-Río, M. R. (2001). Are empirically supported treatments valid for ethnic minorities? Toward an alternative approach for treatment research. *Cultural Diversity and Ethnic Minority Psychology, 7*, 328–342. doi:10.1037/1099-9809.7.4.328.

Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology, 23*, 67–82.

Bernal, G., Trimble, J. E., Burlew, A. K., & Leong, F. T. (2003). Introduction: The psychological study of racial, ethnic, minority psychology. In G. Bernal, J. E. Trimble, A. K. Burlew, & F. T. Leong (Eds.), *Handbook of racial and ethnic minority psychology* (pp. 1–12). Tjhousand Oaks: Sage.

Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice, 40*, 361–368. doi:10.1037/a0016401.

Bernal, G., Morales-Cruz, J., & Gómez-Arroyo, K. (2017). In search of a global family psychology: Challenges and perspectives. In B. Fiese (Ed.), *APA Handbook on contemporary family psychology*. Washington, D.C.: APA Books.

Berry, J. (2013). Achieving a global psychology. *Canadian Psychology/Psychologie Canadienne, 54*, 55.

Berry, J. (2016). Global, indigenous, and regional perspectives on international psychology. In J. L. R. D. Chadee (Ed.), *Caribbean psychology: Indigenous contributions to a global discipline* (pp. 45–68). Washington, DC: American Psychological Association.

Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist, 48*, 629–637. doi:10.1037/0003-066X.48.6.629.

Blase, K., & Fixsen, D. (2013). Core intervention components: Identifying and operationalizing what makes programs work. ASPE Research Brief. US Department of Health and Human Services.

Cardemil, E. V. (2010). Cultural adaptations to empirically supported treatments: A research agenda. *The Scientific Review of Mental Health Practice, 7*, 8–21.

Christopher, J. C., Wendt, D. C., Marecek, J., & Goodman, D. M. (2014). Critical cultural awareness: Contributions to a globalizing psychology. *American Psychologist, 69*, 645–655. doi:10.1037/a0036851.

CONSORT. (2017). CONSORT—Transparent reporting of trials. Retrieved from http://www.consort-statement.org/.

Cuijpers, P., Muñoz, R. F., Clarke, G. N., & Lewinsohn, P. M. (2009). Psychoeducational treatment and prevention of depression: The "coping with depression" course thirty years later. *Clinical Psychology Review, 29*, 449–458.

Dawson-McClure, S., Calzada, E. J., & Brotman, L. M. (2016). Engaging parents in preventive interventions for young children: Working with cultural diversity within low-income, urban neighborhoods. *Prevention Science*, 1–11.

Des Jarlais, D.C. (2014). TREND (transparent reporting of evaluations with nonrandomized designs). *Guidelines for Reporting Health Research: A User's Manual*, 156–168.

Domenech Rodríguez, M. M., & Bernal, G. (2012). Bridging the gap between research and practice in a multicultural world. In G. Bernal & M. M. Domenech Rodríguez (Eds.), *Cultural adaptations: Tools for evidence-based practice with diverse populations* (pp. 265–287). Washington, DC: American Psychological Association.

Flannery, D. J., Todres, J., Bradshaw, C. P., Amar, A. F., Graham, S., Hatzenbuehler, M., et al. (2016). Bullying prevention: A summary of the report of the national academies of sciences, engineering, and medicine: Committee on the biological and psychosocial effects of peer victimization: Lessons for bullying prevention. *Prevention Science, 17*, 1044–1053. doi:10.1007/s11121-016-0722-8.

Ford, D.H., & Urban, H.B. (1998). *Contemporary models of psychotherapy: A comparative analysis*: John Wiley & Sons Inc.

Author's personal copy

Gone, J. P. (2009). A community-based treatment for Native American historical trauma: Prospects for evidence-based practice. Journal of Consulting and Clinical Psychology, 77(4), 751–762. doi:10.1037/a0015390.

Griner, D., & Smith, T.B. (2006). Culturally adapted mental health intervention: A meta-analytic review: Educational Publishing Foundation.

Hall. G.C.N., & Ibaraki, A.Y. (2015). Multicultural issues in cognitive-behavioral therapy *The Oxford Handbook of Cognitive and Behavioral Therapies*.

Hall, G. C. N., Ibaraki, A. Y., Huang, E. R., Marti, C. N., & Stice, E. (2016). A meta-analysis of cultural adaptations of psychological interventions. *Behavior Therapy, 47*, 993–1014. doi:10.1016/j.beth.2016.09.005.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. doi:10.1017/S0140525X0999152X.

Henry, D., Tolan, P., Gorman-Smith, D., & Schoeny, M. (2016). Alternatives to randomized control trial designs for community-based prevention evaluation. *Prevention Science*, 1–10.

Huey Jr., S. J., & Polo, A. J. (2008). Evidence-based psychosocial treatments for ethnic minority youth. *Journal of Clinical Child & Adolescent Psychology, 37*, 262–301.

Koslofsky, S., & Domenech Rodríguez, M. M. (2017). Cultural adaptations to psychotherapy: Real-world applications. *Clinical Case Studies, 16*, 3–8.

Kumpfer, K., Magalhães, C., & Xie, J. (2016). Cultural adaptation and implementation of family evidence-based interventions with diverse populations. *Prevention Science*, 1–11.

Kuukkanen, J.-M. (2011). I am knowledge. Get me out of here! On localism and the universality of science. *Studies in History and Philosophy of Science Part A, 42*, 590–601.

Lau, A. S., Chang, D. F., Okazaki, S., & Bernal, G. (2016). *Psychotherapy outcome research with ethnic minorities: What is the agenda? Evidence-based psychological practice with ethnic minorities: Culturally informed research and clinical strategies* (pp. 31–53). Washington, DC: American Psychological Association.

van Loon, A., van Schaik, A., Dekker, J., & Beekman, A. (2013). Bridging the gap for ethnic minority adult outpatients with depression and anxiety disorders by culturally adapted treatments. *Journal of Affective Disorders, 147*, 9–16.

Manson, S. M. (1996). The wounded spirit: a cultural formulation of post-traumatic stress disorder. *Culture, medicine, and psychiatry*.

Manson, S. M., Beals, J., O'Nell, T., Piasecki, J., Bechtold, D., Keane, E., & Jones, M. (1996). Wounded spirits, ailing hearts: PTSD and related disorders among American Indians.

Marchand, W. R. (2012). Mindfulness-based stress reduction, mindfulness-based cognitive therapy, and Zen meditation for depression, anxiety, pain, and psychological distress. *Journal of Psychiatric Practice®, 18*, 233–252.

Mejia, A., Leijten, P., Lachman, J. M., & Parra-Cardona, J. R. (2016). Different strokes for different folks? Contrasting approaches to cultural adaptation of parenting interventions. *Prevention Science*, 1–10.

Moghaddam, F. M., Emeling, C. E., Montero, M., & Lee, N. (2007). Toward a conceptual foundation for a global psychology. In M. J. Stevens & U. P. Gielen (Eds.), *Toward a global psychology: Theory, research, intervention, and pedagogy*. London: Lawrence Erlbaum Associates.

Muñoz, R.F., & Mendelson, T. (2005). Toward evidence-based interventions for diverse populations: The San Francisco General Hospital prevention and treatment manuals. Journal of consulting and clinical psychology, 73(5).

Nill, A. C. (2011). Latinos and SB 1070: Demonization, dehumanization, and disenfranchisement. *Harvard Latino Law Review, 14*, 35.

Noble, W. W. (2015). *The island of memes: Haiti's unfinished revolution*. Baltimnore: Black Classic Press.

Odin, S. (1996). *The social self in Zen and American pragmatism*: SUNY Press.

Parra-Cardona, J. R., Bybee, D., Sullivan, C. M., Rodríguez, M. M. D., Dates, B., Tams, L., & Bernal, G. (2017). Examining the impact of differential cultural adaptation with Latina/o immigrants exposed to adapted parent training interventions. *Journal of Consulting and Clinical Psychology, 85*, 58–71. doi:10.1037/ccp0000160.

Pedersen, P. (2013). *Multiculturalism as a fourth force*. London: Routledge.

Ramírez III, M. (1999). *New development in mestizo psychology: Theory, research, and application*. MI: Retrieved from East Lansing https://jsri.msu.edu/upload/occasional-papers/oc46.pdf.

Rathod, S., Kingdon, D., Pinninti, N., Turkington, D., & Phiri, P. (2015). *Cultural adaptation of CBT for serious mental illness: a guide for training and practice*: Wiley.

Rohner, R. P. (1984). Toward a conception of culture for cross-cultural psychology. *Journal of Cross-Cultural Psychology, 15*, 111–138. doi:10.1177/0022002184015002002.

Rosselló, J., Bernal, G., & Rivera-Medina, C. (2012). Individual and group CBT and IPT for Puerto Rican adolescents with depressive symptoms.

Sabogal, F., Marín, G., Otero-Sabogal, R., Marín, B. V., & Perez-Stable, E. J. (1987). Hispanic Familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences, 9*, 397–412. doi:10.1177/07399863870094003.

Smith, T. B., & Trimble, J. E. (2016). *Introduction: Multiculturalism in psychology and mental health services foundations of multicultural psychology: Research to inform effective practice* (pp. 3–18). Washington, DC: American Psychological Association.

Smith, T. B., Rodriguez, M. D., & Bernal, G. (2011). Culture. *Journal of Clinical Psychology, 67*, 166–175.

Sue, D. W. (1996). Multicultural counseling: Models, methods, and actions. *The Counseling Psychologist, 24*, 279–284.

Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69*(6), 907–924.

Trickett, E.J., & Birman, D. (1989). Taking ecology seriously: A community development approach to individually based preventive interventions in schools.

Trickett, E.J., Kelly, J.G., & Vincent, T.A. (1985). The spirit of ecological inquiry in community research. Community research: Methods, paradigms, and applications, 283–333.

Trimble, J., Sharrón-Del-Río, M., & Bernal, G. (2010). The itinerant researcher: Ethical and methodological issues in conducting cross-cultural mental health research. In D. Jack & A. Ali (Eds.), *Cultural perspectives on women's depression: Self-silencing, psychological distress and movement to voice* (pp. 73–97). New York: Oxford University Press.