CULTURAL ADAPTATIONS TO EMPIRICALLY SUPPORTED TREATMENTS: A RESEARCH AGENDA

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The movement to establish uniform standards for the identification of empirically supported treatments (EST) has contributed to an impressive growth in the number of treatments deemed to have strong evidence of their efficacy. Those treatments meeting the most rigorous standards are often granted the label well-established and have been identified in a variety of online and print formats. An important criticism of the EST movement is the fact that the overwhelming majority of treatments identified as well-established have limited evidence of their generalizability to participants from different cultural groups. One approach to addressing this limitation has been the development and evaluation of cultural adaptations of these treatments. Although the emerging evidence frequently documents the efficacy of cultural adaptations, many questions remain. In this article, I examine the several issues related to the development and evaluation of cultural adaptations of empirically supported treatments. Specifically, I address the following questions: (1) What information should inform whether and when to adapt an existing treatment for a particular racial, ethnic, or cultural group? (2) How should cultural adaptations be made to an existing treatment? And finally, (3) how should a culturally adapted treatment be empirically evaluated?

In 1998, a series of articles pushed forward by the American Psychological Association’s Division 12 brought the terms empirically supported treatment into the lexicon of clinical psychology (e.g., Chambless & Hollon, 1998; Chambless & Ollendick, 2001). The aim of these articles was to introduce a uniform set of standards which the field of clinical psychology would use to determine which psychological treatments had sufficient empirical support to be considered efficacious. Emerging from these standards were different labels that could be earned by particular treatments that had appropriate levels of empirical support, with the well-established treatments being those that demonstrated the greatest evidence of efficacy, followed by probably efficacious treatments and experimental or possibly efficacious treatments (Chambless & Ollendick, 2001). The 10 years since the initial publication of these standards have brought a sharp increase in the number of treatments considered to have met these standards; these treatments span a number of disorders and populations. Moreover, the list of treatments that have earned these labels have been publicized in a variety of print and online formats (e.g., APA, Division 12, n.d.; Chambless & Ollendick, 2001).

The past 10 years has also been witness to considerable disagreement regarding many aspects of the move to establish empirically supported treatments, including concern regarding the overuse of randomized controlled trial methodology, the unrealistic focus on patients who present with a single disorder with no comorbidity, and the lack of regard for nonspecific therapeutic factors (Norcross, Beutler, & Levant, 2006; Westen, Novotny, & Thompson-Brenner, 2004). Of particular relevance to this article is the criticism that the overwhelming majority of treatments listed as efficacious according to the Division 12 standards have not included sufficient numbers of participants from different racial, ethnic, and cultural groups to allow for any claims about the generalizability of these treatments to individuals from diverse backgrounds (Bernal & Scharrón-del-Rio, 2001; Hall, 2001; La Roche & Christopher, 2008).

There are several reasons why this criticism should be

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Research Agenda for Cultural Adaptations

taken seriously. First, within the U.S., the demographics of the population are rapidly changing, with U.S. Census estimates suggesting that by the year 2050 the number of non-Hispanic White U.S. residents will be below 50% of the total U.S. population (U.S. Census Bureau, 2008). Moreover, approximately 85% of the world population lives outside of the U.S. and Europe. And yet, the overwhelming majority of treatment outcome research has been conducted primarily with individuals from European-American middle-class backgrounds (Bernal & Scharrón-del-Río, 2001; La Roche & Christopher, 2008). The dearth of research studies that have included diverse populations in their studies is problematic for a variety of reasons, but most obviously because it undermines the implicit claim that well-established, probably efficacious, and possibly efficacious treatments are universally efficacious. That is, the very movement to promote treatments that have empirical support for their efficacy is making a claim about the universal efficacy of treatments in the absence of empirical support.

Second, research has begun to find important cultural group differences in both the prevalence rates of psychological disorders and risk and protective factors for these disorders. For example, results from both the original National Comorbidity Survey and the more recently completed National Comorbidity Survey–Replication indicated that Latinos and African Americans have significantly lower risk for mental disorders than do Caucasians (Kessler, Chiu, Demler, & Walters, 2005; Kessler et al., 1994). These findings are intriguing given that both the NCS and the NCS-R found that low family income and low education were significant risk factors for mental disorders (Kessler et al., 2005), and that research has consistently found that Latinos and African Americans are disproportionately represented among the economically disadvantaged (Bishaw & Iceland, 2003; Danziger, Sandefur, & Weinberg, 1994; U.S. Department of Health and Human Services, 2001). These contradictory findings suggest that there may be racial, ethnic, or cultural differences in the prevalence of psychological disorders that are not the result of socioeconomic disadvantage. With regard to risk and protective factors for particular disorders, emerging research is beginning to suggest that culture might also play a moderating role. A well-cited example can be found in the work of López and colleagues (2004), who found support for the notion that family processes may be differentially related to the course of schizophrenia for Mexican American and Anglo American families. In particular, they found that for Mexican American families, but not for Anglo Americans, expression of familial warmth was a protective factor against relapse. They also found that for Anglo Americans, but not Mexican Americans, expressed criticism was a risk factor for relapse. Another example can be found in the research documenting that racism is a salient stressor for African Americans and associated with physical health problems (Clark, Anderson, Clark, & Williams, 1999). More recently, Woods-Giscombe and Lobel (2008) found support for the notion that African American women experience race-related and gender-related stress in addition to more generic stress. These findings suggest that there may be culture-specific risk factors for psychological disorders.

Third, considerable research has documented significant mental healthcare disparities affecting individuals from low-income and racial and ethnic minority backgrounds (Snowden & Yamada, 2005; U.S. Department of Health and Human Services, 2001). These individuals are less likely than Caucasians to receive formal mental health services (Alegria et al., 2002; Wells, Klap, Koike, & Sherbourne, 2001), especially if they are less acculturated or recent immigrants (Alegria, Mulvaney-Day, Woo, et al., 2007; Cabassa, Zayas, & Hansen, 2006). Moreover, if they seek formal mental health services, they are more likely to prematurely terminate them (e.g., Organista, Muñoz, & Gonzalez, 1994). These disparities have been found even when controlling for sociodemographic and clinical characteristics (Lagomasino et al., 2005; Padgett, Patrick, Burns, & Schlesinger, 1994), suggesting that mental healthcare disparities are not simply the result of economic factors like poverty, but may result in part from the inattention to issues of culture in the development, evaluation, and dissemination of mental health interventions.

Thus, the changing demographics of the U.S., the emerging research showing cultural effects in both prevalence rates for disorders and risk/protective factors for disorders, and the well-documented mental health care disparities make the case that cultural considerations need to be more comprehensively integrated into the development and evaluation of empirically supported treatments. And, indeed, the past 15 years has seen a dramatic increase in the development and evaluation of interventions that have been adapted for particular cultural populations. In their review of psychosocial interventions for racial and ethnic minorities, Miranda and colleagues (2005) find generally positive effects for those interventions that had been adapted for racial and ethnic minority children and adults, with particularly strong findings for the treatment and prevention of depression in African American and Latino adults. Less
information exists regarding the efficacy of psychosocial interventions for Asian Americans and American Indians. Griner and Smith (2006) recently conducted a meta-analysis of 76 intervention studies across a variety of disorders and found a generally positive effect of participating in a culturally adapted intervention ($d=0.45$). Of note, results indicated that those studies with high numbers of Latino participants had particularly strong effects. Moreover, among studies that focused on Latinos only, treatments that were focused on less acculturated participants generally did better than those that were focused on more acculturated participants. With regard to interventions for youth and adolescents, Huey and Polo (2008) published a meta-analysis in which they found medium effect sizes ($d=0.44$) for several evidence-based interventions that have been conducted with ethnic minority youth. Interestingly, their analyses of aggregate data indicated that there was no difference in outcome between “culturally responsive” treatment and standard treatment.

Taken as a whole, the number of efficacious interventions that have been adapted for use with specific cultural groups suggests that they can be efficacious. However, several important questions remain. In particular, there is currently no consensus regarding the best process for making cultural adaptations to existing treatments. For example, there are currently no clear guidelines as to when to adapt an intervention, for which populations an intervention should be adapted, the extent to which an intervention should be adapted, and how to evaluate the relative contribution of particular adaptations. Thus, in this article, I will put forth recommendations to help address the following questions: (1) What information should inform whether and when to adapt an existing treatment for a particular racial, ethnic, or cultural group? (2) How should cultural adaptations be made to an existing treatment? And finally, (3) how should a culturally adapted treatment be empirically evaluated?

**Definitions of Culture, Race, and Ethnicity**

Cultural adaptations are modifications to existing treatments in ways that make them more culturally relevant and attractive to individuals from particular cultural groups (e.g., Castro, Barrera, & Martinez, 2004; Cardemil, 2008; Lau, 2006; Miranda et al., 2005; Muñoz & Mendelsohn, 2005). When conceptualizing the different groups, authors often interchangeably use the terms *culture*, *race*, and *ethnicity* (Atkinson, Morten, & Sue, 1998; Helms & Cook, 1999), making it useful to briefly define them here before discussing the issue of whether and how treatments should be adapted. The term *culture* refers to a shared set of social norms, beliefs, and values that particular groups hold and transmit across generations. These norms, beliefs, and values are thought to be learned and cover a wide range of psychologically relevant topics, including gender and familial roles and relationships, styles of interpersonal communication, and philosophical world views (Betancourt & Lopez, 1993). The term *race* has historically tended to refer to physical or biological characteristics that distinguish particular groups of people from other groups (Atkinson, Morten, & Sue, 1998; Betancourt & Lopez, 1993). The use of racial categorization has tended to presuppose the existence of biological and genetic differences between groups, which more recent biological and sociological research has argued is without merit. Nevertheless, the term *race* has social significance and meaning to individuals and is commonly used as a proxy for culture and ethnicity. Although the term *ethnicity* has included references to physical characteristics, for the most part it refers to the historical cultural patterns and collective identities shared by groups from specific geographic regions of the world (Betancourt & Lopez, 1993; Helms & Cook, 1999). Some of these patterns include language, history, customs, and rituals.

Race, ethnicity, and culture have significant overlap, but are clearly not the same constructs (Alvidrez, Azocar, & Miranda, 1996; Betancourt & Lopez, 1993). For example, the racial category *Asian* would include individuals from very different ethnic groups (e.g., individuals of Chinese, Vietnamese, Malaysian origin). Moreover, two individuals from the same ethnic group might be very different culturally given where they spent their formative years (e.g., growing up in Mainland China versus growing up in San Francisco). Because this article is focused on cultural adaptations to psychosocial interventions, I will use the term culture instead of race and ethnicity when referring to particular groups of people for whom an intervention has been adapted. The advantage of the term culture is that it emphasizes constructs that are operationalizable and measurable, it more flexibly incorporates different dimensions of identity than do the terms race and ethnicity, and it can help remind researchers that understanding why group differences exist is much more informative than simply understanding that they exist.

Importantly, culture is most accurately conceptualized as a multidimensional and contextual phenomenon that incorporates a variety of sociopolitical identities, including gender, socioeconomic status, and minority
status. Thus, it would be overly simplistic to assume homogeneity in cultural worldviews among individuals from the same ethnicity but who vary in their gender, socioeconomic status, and experiences as a minority. This point is relevant to the issue of cultural adaptations in that the overwhelming majority of cultural adaptations have been made for individuals from racial and ethnic minority backgrounds who also come from low-income backgrounds. Thus, caution is in order when generalizing findings to a larger cultural group when the intervention has likely been adapted to a subset of that group that may not be representative of the larger cultural group.

**WHAT EVIDENCE SHOULD INFORM THE NEED TO ADAPT A TREATMENT?**

On the face of it, the question of how to determine whether a particular treatment should be adapted for a particular cultural group seems straightforward. In particular, a treatment should be adapted for a particular cultural group when results indicate that this particular treatment is significantly less efficacious with individuals from that specific cultural group. When adequately powered studies (i.e., include sufficient numbers of individuals from different cultural minority groups) find no cultural group differences in efficacy, then there is no need to develop a cultural adaptation. A good example of an intervention for which data support the equivalency of effects across different cultural groups is the parenting management program, the Incredible Years (Reid, Webster-Stratton, & Beauchaine, 2001; Webster-Stratton, 1998). In an analysis of data from two randomized controlled trials, Reid and colleagues (2001) found that the program was generally effective with regard to changing both parental behavior (mothers were more positive, less critical, more consistent, and more competent in parenting) and with regard to the subsequent behavior changes in the children. Because the authors recruited and enrolled large numbers of participants from four different cultural groups (Caucasian, African American, Latino, and Asian Americans), they were able to conduct the relevant moderation analyses to investigate cultural differences in efficacy. Their results indicated that there were no differences in treatment efficacy with the intervention across the four cultural groups. The authors also found no cultural group differences in attendance, and only small differences in parental satisfaction with the intervention (with Caucasian mothers being more critical of the program). The Incredible Years parenting program explicitly considers cultural sensitivity in its attention to the participating parents, who are encouraged to identify their own personal goals and expectations for their children and with an explicit focus on respect for diverse perspectives (Reid et al., 2001). As such, cultural considerations are woven into the fabric of the program for all participants, obviating the need for the development of different versions of the intervention.

The model provided by the Incredible Years is exemplary in its flexibility to work with diverse families and the resultant equivalency of effects across cultural groups. However, it would be a mistake to then assume that the determination of need for a cultural adaptation can be made by reviewing the literature on equivalency of effects for particular interventions. There are at least two important problems with this seemingly straightforward logic. First, as others have noted (e.g., Bernal and Scharrón-del-Río, 2001; Hall, 2001; La Roche, 2008), in fact very few empirically supported treatments have included sufficient numbers of individuals from diverse cultural groups to allow for adequate statistical comparisons. As a result, the existing state of the evidence with the majority of empirically supported treatments provides very little useful data that can inform whether or not an adaptation is needed. Second, this perspective overly values results from efficacy trials (e.g., symptom change) and undervalues results from effectiveness trials (e.g., acceptability and feasibility). That is, if effectiveness trials find that a particular treatment has low enrollment and high dropout among individuals from particular cultural groups, then there may be utility from particular adaptations that are designed to enhance acceptability of the treatment.

Given this problematic state of the field, what evidence should inform the need to adapt a treatment? Clinical psychology’s tradition of defining the null hypothesis as an absence of difference between groups is inadequate as a guide in this instance, given the dearth of sufficiently powered studies that have been able to investigate the generalizability of treatments to individuals from different cultural groups. Thus, 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. This is particularly true given the healthcare disparities that disproportionately affect individuals from cultural minority groups (Snowden & Yamada, 2005; U.S. Department of Health and Human Services, 2001). Efficacy research does not typically investigate the social validity of treatments (e.g., acceptability of the treatment to potential participants), which makes it possible that treatments that perform well in highly con-
trolled settings due to increased resources from investigative teams simply will not translate to real-world settings (Bernal & Scharrón-del-Río, 2001; Lau, 2006; Sue, 1998).

Thus, instead of assuming that newly developed treatments are universally efficacious, researchers should take the scientifically cautious assumption and presume that findings from any newly developed treatment are relevant only with those specific populations in which they have been evaluated. This is not to say that researchers should assume that treatments will not be efficacious or will be less efficacious with certain populations, but rather that a healthy skepticism toward universality should be maintained until data clearly indicate that cultural and contextual factors do not moderate outcome. To date, this perspective has not been emphasized by Division 12 and supporters of empirically supported treatments, perhaps because it places the burden of proof on the research team that has developed that particular treatment. From this perspective, in order to earn the various labels demonstrating different levels of empirical support (i.e., well-established, probably efficacious, possibly efficacious), research teams should have to also demonstrate generalizability of effects with multiple cultural groups. This could be accomplished through a few randomized controlled trials that include sufficient numbers of individuals from different cultural groups to allow for appropriate moderation analyses examining differential efficacy. This could also be accomplished through multiple randomized controlled trials, each of which focuses on individuals from a different cultural group. And in fact, there has been some movement in this direction, with several research groups using both approaches to investigate the generalizability of their interventions. For example, in Huey and Polo’s (2008) meta-analysis, they identified several treatments with racial and ethnic minority children and adolescents that met Division 12’s criteria for probably efficacious and possibly efficacious. No treatments were categorized as well-established, however, because they had not met the criteria of having efficacy been demonstrated by two independent research teams.

Even in instances in which non-adapted treatments are deemed efficacious with particular cultural groups, the burden should also be on the research team to document equivalence in acceptability of treatment across the cultural groups. Treatment acceptability can be understood as the extent to which participants understand and experience the treatment to be a legitimate and useful intervention for them. As such, acceptability should be minimally operationalized through recruitment and enrollment rates, drop-out rates, and dosage of treatment received (i.e., sessions attended, homework completed). More nuanced operationalizations of acceptability could also include data documenting participant acceptance of the treatment rationale, participant-therapist alliance, and general satisfaction with the treatment process. Failure to demonstrate equivalent acceptability across cultural groups would suggest that adaptation may be needed.

**How Do We Proceed with Making Cultural Adaptations?**

Determining what cultural adaptations to make is complex, as it necessitates consideration of adaptations at a variety of levels (Barrera & Castro, 2006; Bernal & Saéz-Santiago, 2006; Cardemil et al., in press; Lau, 2006; Hall, 2001). Some scholars have recently begun to distinguish between two types of cultural adaptations that lie at the ends of a continuum (Castro, et al., 2004; Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, 2000). Superficial, or surface, modifications are those that consist of small changes to the intervention so as to match the delivery of the intervention to observable characteristics of the target population, but that leave the vast majority of the original intervention intact. Castro and colleagues (2004) give the example of changing the ethnicity of role models or characters in an intervention so that they resemble more closely the ethnicity of the participants in the program. Another example of a surface level modification might be the decision to deliver an intervention in a community church, rather than in a mental health clinic. Conversely, core, or deep, modifications consist of changes to the intervention that result in more carefully taking into consideration central cultural aspects of the relevant ethnic group. Thus, core modifications might include finding ways to incorporate into program delivery many of the salient cultural values discussed earlier in the first perspective, using relevant cultural expressions, metaphors, and proverbs to convey important themes, and changing program content to be more relevant to the lives of the participants.

More concretely, adaptations can be made in different facets of the program. Specifically, adaptations can be made in structural aspects of the program, through the inclusion of culturally relevant content into program material, in the delivery of the program, and in the behavior of the intervention providers (i.e., therapists). Adaptations along each of these dimensions are often made within the same program so as to complement each other. Further, adaptations are often made for particular populations and so attempt to take into consider-
atation the complexity of culture discussed earlier. I now describe each in turn.

**Cultural adaptations in program structure**

Structural considerations have to do with how the intervention is organized so as to provide the desired therapeutic effect. The most obvious structural considerations are those decisions regarding the modality (e.g., individual, group, an integrated approach) and dosage (e.g., number and frequency of sessions) of the intervention. Other structural considerations might include decisions regarding the use of homework, the ordering in which particular content or skills are presented to patients over the course of treatment, and the incorporation of regular assessment of symptom change.

With regard to cultural adaptations, examples of structural adaptations include the addition of educational information sessions prior to the commencement of the actual intervention (Miranda, Chung, Green, Krupnick, Siddique, Revicki, & Belin, 2003), the incorporation of adjunctive case management to the intervention (Miranda, Azocar, Organista, Dwyer, and Areane, 2003), and the addition of family sessions to group or individual sessions (Cardemil, Kim, Pinedo, & Miller, 2005). One particularly innovative structural adaptation was conducted by Vega, Valle, Kolody, & Hough (1987), who developed a cognitive-behavioral depression prevention intervention for Latina women. Rather than using therapists as the delivery providers, the authors used servidoras, or indigenous Latina community helpers, to deliver the intervention to participants.

**Cultural adaptations in program content**

Cultural adaptations in program content have to do with adaptations to the curriculum of interventions so as to make more central culturally relevant material. Many empirically supported interventions include life examples of particular themes, role-play situations, and stories that make the thematic and didactic material more accessible to the clients. Some of this material is explicitly contained in therapist manuals, some of it is included in homework material, and some of it is more informal material used by the therapist during the sessions. Cultural adaptations typically include explicit examples that highlight topics that are relevant to their particular populations. Some of these examples might include stories about immigration and immigration-related stress, experiences with prejudice and discrimination, and the stresses associated with lack of financial resources.

Muñoz and Mendelsohn (2005) suggest that including culturally relevant content is important, but insufficient. They describe how in addition to explicit discussion of relevant issues like spirituality and religion, acculturation, and experiences with racism, discrimination, and prejudice, cultural adaptations should include the use of culturally relevant metaphors and stories as a means to convey key cognitive-behavioral principles as well as the identification and incorporation of cultural values into relevant intervention strategies (e.g., recognizing that the cultural value of *familism* may make immigration especially difficult for those who have left family members in their country of origin).

**Cultural adaptations to the delivery of the intervention**

The third area where cultural adaptations can be made is in how the program is delivered. Many articles describing cultural adaptations highlight the importance of having therapists or intervention leaders deliver the intervention in a more friendly and relaxed manner that is commonly associated with therapeutic interventions. Some articles describe this informality as building on particular cultural values of racial or ethnic groups (e.g., *personalismo* among Latinos), others discuss making adaptations that make the delivery of the program feel more communal and egalitarian and less hierarchical.

Specific examples of efforts to change the delivery of the program commonly include increased self-disclosure on the part of the intervention leader, explicit highlighting of the collaborative nature of the therapeutic work and the expertise brought by the client, and the provision of food during therapy sessions. Cardemil and colleagues (2005) describe their efforts to be sensitive to their participants’ busy schedules that resulted from the many competing demands that are reported by many low-income families (e.g., multiple jobs, various appointments with different social service agencies, transportation difficulties). These efforts included increased flexibility in the scheduling of both assessment and intervention sessions, offering bus passes or taxi vouchers to all participants, and providing onsite childcare for those participants who needed it.

**Cultural adaptations to therapist behavior**

The fourth area where cultural adaptations can be
made lies in the behavior of the therapists themselves. In particular, therapists can be trained to be culturally competent so that they are skilled at working with individuals from particular cultural groups (Sue, 2001). Different definitions of cultural competence exist, but they all highlight the ability to understand and develop a strong therapeutic relationship with individuals from different ethnic or cultural backgrounds. Generally, this ability includes knowledge about specific cultures (e.g., Arredondo & Perez, 2003; Hines & Boyd-Franklin, 1996), as well as a more general awareness and understanding of issues of difference, power, and marginalization (Hays, 2008; Sue, 1998). For particular cultural groups, being culturally competent could also include the ability to speak the language of that group well enough to conduct the intervention in that language.

Although not commonly articulated in research that describes cultural adaptations, careful selection and training of intervention leaders is important. For example, Cardemil and colleagues (2010) describe how all of their intervention leaders were bilingual and bicultural and had experience working with low-income Latina women. Beyond this background experience, the intervention leaders participated in both a training program and regular ongoing supervision that went beyond training in the delivery of the content of the material. It included open discussions on issues related to culture, SES, gender, and power and privilege, particularly as they related to perceived and/or real differences between intervention leaders and the women in the study.

**WHEN MIGHT CULTURAL ADAPTATIONS BE INSUFFICIENT?**

Although the literature on cultural adaptations has become increasingly sophisticated in its parsing of the different types of adaptations, an important limitation is the fact that very few culturally adapted interventions have been based on empirical research (Lau, 2006). The likely reason for this limitation is the fact that the majority of cultural adaptations are not viewed as adaptations to the active ingredients that directly contribute to improvement in the functioning of the client (Lau, 2006; Miranda et al., 2006; Muñoz & Mendelson, 2005). Instead, cultural adaptations have been generally conceptualized as the means by which to make existing interventions more attractive and relevant to the participants, thus making it more likely that participants will stay engaged with the intervention. Indeed, Castro and colleagues (2004) point out the tension between fidelity and fit, making the case that cultural adaptations that deviate from the core ingredients of the original intervention run the risk of proving ineffective when implemented. As a result, there has been little consideration of how existing basic research on risk and resiliency factors that are unique to particular sociocultural contexts might directly inform the adaptation of existing treatments or development of novel treatments (Lau, 2006).

However, in some regards, this criticism is misplaced. Adaptations that directly target the underlying theoretical mechanisms of the interventions cease to be adaptations and instead should be considered novel interventions. Admittedly, it can be difficult to determine when an adaptation ceases to be a variant of the original intervention and becomes a novel intervention, especially when the intervention is still rooted in traditional psychotherapy orientations (e.g., cognitive, behavioral, family systems). This distinction is important, however, because adaptations address the issue of generalizability, while novel interventions do not. Thus, it is incumbent upon intervention researchers to identify their intervention as an adaptation or a novel intervention.

One example of an intervention at the boundary between an adaptation and a novel intervention can be found in some recent work by Weisman and colleagues (2005, 2006) who have developed and are beginning to evaluate a novel family-focused therapy for Latinos with schizophrenia that is culturally-informed (CIT-S). The authors developed this intervention in response to the literature documenting differences between Latinos and Caucasians in risk and protective factors for schizophrenia (e.g., López et al., 2004). Their approach was to integrate three modules of standard family focused techniques (i.e., psychoeducation, communication training, and problem-solving) with two modules that address more culturally relevant themes (family cohesion and spirituality). The aim of the intervention is to increase familial empathy, lower levels of critical and hostile attitudes from family members toward the patient with schizophrenia, and to provide a more realistic set of expectations for the course of the disorder. CIT-S is best conceptualized as a novel intervention that works through because the putative mechanism of action is a combination of standard family-focused approaches with novel cultural approaches. Although results from a randomized controlled trial are still pending, Weisman’s work can serve as a model for developing a novel intervention that is theoretically- and empirically-guided.
HOW DO WE EVALUATE THE SUCCESS OF A PARTICULAR CULTURAL ADAPTATION?

Whether or not an intervention is considered a cultural adaptation or a novel intervention rooted in standard therapeutic approaches, evaluating the success of these interventions is complex and should occur at several different levels. These levels include (1) acceptability evaluations, (2) outcome evaluations, (3) comparative evaluations, and (4) mechanism evaluations.

ACCEPTABILITY EVALUATIONS: IS THE CULTURAL ADAPTATION RELEVANT TO THE POPULATION?

As noted earlier, the clinical intervention literature has tended to underemphasize the evaluation of constructs that inform the social validity and relevance of interventions (Sue, 1998; Lau, 2006). Thus, when developing cultural interventions, researchers should take care to ensure that their intervention is acceptable and attractive to the participants from the relevant cultural group. Some of this work can take place prior to the development of the adaptation, through the use of community outreach that explores the acceptability and attractiveness of the intervention and possible adaptations. Scholars in the area of cultural adaptation have recommended the use of individual interviews and focus groups for this feedback. Importantly, given the heterogeneity within cultural groups, researchers should also clearly identify the population along demographic variables identified as salient in the literature (e.g., gender, socioeconomic status, acculturation).

Community feedback can help shape the development of the adapted intervention, but piloting the adaptation will provide the truest index of the intervention’s acceptability. Thus, in initial pilot work, researchers should prioritize the assessment of a variety of participant engagement constructs, including enrollment, attendance, and drop-out rates. Pilot studies do not typically have active therapy control conditions, but engagement data can be collected and compared with engagement data from published studies. Benchmark studies have become increasingly popular (e.g., Weersing & Weisz, 2002) and would offer researchers the opportunity to index their engagement data against that in the literature.

OUTCOME EVALUATIONS: DOES THE CULTURAL ADAPTATION WORK WITH THE PARTICULAR POPULATION?

Following the development and pilot evaluation of the adaptation, the next evaluation is the outcome evaluation: does the intervention produce change in the targeted variable? The clinical intervention literature has established traditional research methodologies for answering this question, including such methodologies as the use of a control condition, random assignment, and multi-modal approaches to assessment (e.g., Chambless & Hollon, 1998; Chambless & Ollendick, 2001). At a minimum, cultural adaptations should be evaluated against a no-treatment or wait-list control condition, although more substantive comparison conditions are preferable (e.g., treatment as usual or standard community care). With regards to existing cultural adaptations, many exist that have strong support for their efficacy as defined by these traditional research methodologies. Among adults, several studies have documented positive results from adaptations of existing cognitive behavioral interventions for depression (Comas-Diaz, 1981; 1986; Miranda et al. 2003a, 2003b, 2006). For example, Miranda and colleagues (2003a, 2003b, 2006) have conducted a variety of randomized controlled trials to investigate the effectiveness of cognitive behavioral treatment with low-income racial and ethnic minority women. In each of these cases, the authors found that the cultural adaptations produced positive outcomes (e.g., reductions in depressive symptoms), particularly as compared with standard community care. Two research teams have found similarly positive effects for the efficacy of interpersonal psychotherapy (IPT) in treating depression during the perinatal period among low-income, minority women (Spinelli & Endicott, 2003; Zlotnick, Miller, Pearlestein, Howard, & Sweeney, 2006). In both cases, participants who were randomly assigned to the adapted interventions reported significantly fewer depressive symptoms than participants randomly assigned to the control conditions.

With regards to children and adolescents, Rosselló and colleagues provide an excellent example of a research team that has found good support for the efficacy of an adapted intervention. Rosselló and Bernal (1999) first conducted a randomized controlled trial comparing adapted versions of CBT and IPT for depression in Puerto Rican adolescents. Results indicated that both adapted treatments produced significantly improved outcome as compared with the wait-list condition, and that IPT produced superior improvement than the wait-list condition in self-esteem and social adaptation. Rosselló, Bernal, and Rivera-Medina (2008) then compared the efficacy of CBT and IPT for depression in group and individual format. Although the authors found no effect of format (group vs. individual), they found
that CBT outperformed IPT in reducing depressive symptoms and improving self-concept.

These examples highlight the strengths of the randomized clinical design in demonstrating the efficacy of cultural adaptations. Importantly, each of these examples conceptualized outcome in standard ways (e.g., depressive symptoms) and used standard measures to assess outcome (e.g., standard depression inventories). This approach is appropriate, given that both the standard and the adapted interventions were focused on the same DSM-IV disorder. Nevertheless, researchers should be mindful of the importance of using measures that have evidence of reliability and validity in their populations (for an excellent discussion of the issues associated with the establishment of measurement equivalence in different populations, see Knight, Roosa, & Umaña-Taylor, 2009).

**Comparison Evaluations: Does the Cultural Adaptation Outperform the Standard Intervention?**

The next level of evaluation is more controversial and addresses the issue of choosing comparison conditions. In particular, although increasing evidence exists supporting the efficacy of cultural adaptations, there exists much less evidence supporting the superiority of cultural adaptations over standard interventions for specific cultural groups (Hall, 2001; Huey & Polo, 2008; Lakes, López, & Garro, 2006). That is, although evidence exists that these adapted interventions may be efficacious, it is not clear that they produce better outcomes than standard interventions. For example, the Griner and Smith (2006) meta-analysis did not examine the sizes of the differences in effects between adapted interventions and standard interventions, focusing instead on the effect sizes of the adapted interventions only. And the Huey and Polo (2008) meta-analysis found no significant differences between “culture-responsive” treatments and standard treatments. However, very few of the studies included in their meta-analysis actually compared cultural adaptations with standard treatments, and so Huey and Polo used aggregate data to make their comparisons. Thus, the state of the field is such that no definitive statement can as yet be made regarding the performance of cultural adaptations in relation to standard treatments.

And yet, the dearth of research that directly compares cultural adaptations to standard interventions is not as problematic as may appear. It is certainly true that there would be little justification for the implementation of cultural adaptations if comparative research found no superiority to standard treatments for particular cultural groups. However, it is unlikely that cultural adaptations would produce substantively better outcomes on symptom change than standard interventions for at least two reasons. First, given the generally positive response produced by standard interventions (Weisz, Weiss, Han, Granger, & Morton, 1995; Wampold et al., 1997), unless the standard intervention performed especially poorly with individuals from specific cultural groups, there will likely be a ceiling effect on additional improvement produced by the cultural adaptation. Second, one of the reasons that so few randomized clinical trials evaluating the efficacy of standard interventions have included sufficient numbers of racial and ethnic minorities is that recruitment and retention is generally more difficult (Knight, Roosa, & Umaña-Taylor, 2009; Miranda, Azocar, Organista, Muñoz, & Lieberman, 1996). And because researchers who directly compare a cultural adaptation with the standard intervention would need to recruit sufficient numbers of participants from the relevant cultural groups, they would need to pay particular attention and care to engagement issues. This attention and care would likely change the very nature of the standard intervention so that it was effectively functioning as a cultural adaptation.

For these reasons, it is misguided for researchers to evaluate the relative efficacy on symptom change between cultural adaptations and standard interventions. Instead, researchers should focus primarily on engagement of participants. In this view, there would be justification for the dissemination of a cultural adaptation that demonstrated substantially better engagement of participants than the standard intervention, even if it did not produce superior symptom change. And although it is true that randomized controlled trials are the best way to conduct comparison questions between treatments, including questions of engagement, benchmark studies can provide very useful information at a much lower cost (Weersing & Weisz, 2002). To be specific, a well-designed randomized controlled study that directly compared a cultural adaptation with a standard intervention would require a relatively large sample size, intervention deliverers who are blind to the overall research design, and stringent oversight of both treatment approaches to ensure high fidelity. Moreover, the research team would need to ensure that therapists who deliver the standard intervention do not supplement the intervention with their own attempts to be culturally sensitive, as this would reduce the substantive differences between the two conditions. All of these design details are not needed if the likely distinguishing outcome between the two
conditions is not symptom change, but engagement. Instead, a well-designed randomized clinical trial comparing a cultural adaptation with a wait-list condition or usual care can provide engagement data (i.e., recruitment, retention, drop-out rates) that can be directly compared to similarly published data from the standard treatments (e.g., Miranda et al., 2003).

**Mechanism Evaluations: What Specific Cultural Modifications Work?**

The final level of evaluation is akin to the mechanism research that exists in standard clinical psychology literature. At this level of evaluation the research question attempts to understand the extent to which particular cultural modifications to an intervention are associated with outcome. In other words, which specific elements of an intervention need to be altered in order to promote a more efficacious outcome? The two primary ways in which researchers typically conduct mechanism research are through process studies, which are typically correlational, and dismantling studies, which are typically experimental (Doss, 2004; Hunsley & Rumsteine-McKean, 1999). To date, the majority of cultural adaptation research has been limited to evaluations of the overall intervention, with very few little mechanism research being conducted with cultural adaptations. As a result, cultural adaptations have generally been described in the methods sections of articles, rather than in the results sections. One notable exception was conducted by Miranda and colleagues (2003b) in which they evaluated the utility of a structural cultural adaptation to cognitive behavioral group therapy for depression among low-income, ethnically diverse medical outpatients. Their study could be conceptualized as a dismantling study in that the authors directly compared cognitive-behavioral group therapy and cognitive-behavioral group therapy plus adjunctive case management. Thus, if the cultural adaptation demonstrated superior outcome, the outcome could be directly attributed to the adjunctive case management. In fact, results did indicate lower dropout rates and fewer depressive symptoms at the six-month follow-up point for participants who received the adjunctive case management. The findings from this study are unique in that they provide strong empirical evidence for the utility of adjunctive case management as a structural adaptation above and beyond standard cognitive-behavioral group therapy for depressed medical outpatients. Further, the authors found an advantage for the cultural adaptation with regards to both symptom improvement and engagement in the treatment.

Unfortunately, the state of the literature is such that the Miranda study is the exception, rather than the rule, and so there is considerable room for researchers to begin to document associations between particular adaptations and outcome/engagement. It should be noted that although the absence of empirical evaluation of structural adaptations is problematic, evaluation of structural, content, and delivery considerations are rarely evaluated empirically by developers of standard interventions when first evaluating their efficacy. That is, while the decisions regarding the structure of a novel intervention are likely considered carefully, they are rarely compared statistically with alternative possibilities. For example, no published study has demonstrated that the standard CBT intervention for depression with 16 one-hour sessions produces significantly better results than a comparable 12-session CBT intervention with sessions that last 1 hour and 20 minutes each. It is true, however, that structural considerations are often evaluated empirically when adaptations are being made (e.g., to shorten the number of sessions in an intervention, to change the format of the intervention to an online format). Thus, the absence of empirical evaluations of structural adaptations is likely a reflection of the fact that cultural adaptations are still in the early stages of development.

Of the four different types of adaptations noted earlier (i.e., adaptations to program structure, content, delivery, and therapist behavior), adaptations to program structure and delivery lend themselves most readily to experimental dismantling designs in which two or more versions of the adapted intervention are compared with each other. Evaluations of therapist behavior would most easily be studied through observational methods that compare differential training and supervision across multiple therapists. As with evaluations of outcome, the traditional clinical psychology literature can serve as a guide for the development of these sorts of studies.

**Concluding Thoughts**

The movement to identify interventions that have empirical evidence of efficacy has been generally positive and has led to a burgeoning list of interventions that have a strong evidence base (APA Division 12, n.d.). And yet, there remain significant gaps in our knowledge regarding the generalizability of these interventions to individuals from different cultural groups. In this article, I have argued that it is incumbent upon developers of interventions to take seriously the question of generalizability and to err on the side of assuming particularity
over universality. The basic research highlighting the existence of culture-specific risk and protective factors, the healthcare disparities that disproportionately affect individuals from racial and ethnic minority groups, and the increasing evidence suggesting that cultural adaptations can be effective make the case that researchers should be skeptical that their interventions are equally efficacious across cultural groups. In this article, I have focused primarily on the steps researchers should take in efforts to develop cultural adaptations of their interventions. These steps should investigate the social validity/acceptability, the efficacy, and the mechanisms of action of the cultural adaptations and should comprehensively assess both symptom change and indices of engagement. Increased effort to develop and evaluate cultural adaptations can help reduce both the gaps in our knowledge and the extant healthcare disparities.

Unfortunately, the current dearth of evidence supporting the efficacy of interventions across different racial and ethnic groups has not been publicized as widely as the list of interventions. For example, the website published by Division 12 of the American Psychological Association which lists interventions with a research support makes no mention of the evidence base examining questions of generalizability. Not only does this lack of public acknowledgment provide misleading information to consumers and clinicians, but it also fails to contribute to the identification of clear research programs that could rectify the limitations. Division 12 and the American Psychological Association should instead recognize the limitations of our knowledge and develop revised, more accurate labels that reflect the current state of knowledge. Huey and Polo (2008) provide some possible complementary guidelines for determining if an evidence-based intervention could be classified as well-established, probably efficacious, or possibly efficacious with ethnic minority youth. They suggest that studies either (1) have a sample comprised of at least 75% ethnic minority youth, or (2) have demonstrated superiority of effect to control condition in separate analyses conducted solely with ethnic minority youth, or (3) have sufficiently powered analyses that demonstrate no moderation effect of ethnicity on outcome. This approach is a positive step forward, but it is limited in that it does not provide any way to categorize treatments that have no evidence of efficacy with individuals from diverse cultural groups.

Thus, instead of the current classification system that distinguishes among treatments that are well-established, probably efficacious, and possibly efficacious, I suggest a classification system that values the establishment of generalizability along with that of efficacy. Thus, the three categories would be (1) well-established and generalizable, (2) probably efficacious and generalizable, and (3) possibly efficacious and generalizable. Generalizability could be defined using Huey and Polo’s (2008) guidelines, although the particular cultural groups would need to be specified. Thus, in this classification system, no treatment could be identified as well-established unless there was also evidence for its generalizability to individuals from at least two different cultural groups. Importantly, generalizability could be demonstrated in a variety of ways, including but not limited to the development and evaluation of cultural adaptations.

One possible critique of this approach is that it could lead to an explosion in the number of different ESTs for particular populations, making it implausible that clinicians would be able to learn and implement them. The problem with this critique is that it ignores the original purpose of the empirically supported treatment movement. Namely, the point of developing criteria for determining those treatments that have empirical support was to emphasize the use of data and evidence as determinants of efficacy, rather than politics or tradition. Thus, if careful attention to issues of generalizability produces evidence that a large number of cultural adaptations are needed, then the field of clinical psychology should adapt to that reality. Whether or not an intervention is efficacious or acceptable with a particular population is an empirical question, whose answers should guide the dissemination of lists empirically supported treatments. This approach, then, provides a much more accurate representation of the state of the field and of particular interventions.

In addition, highlighting the gaps in generalizability through more accurate labeling can also provide incentive to research teams to explore these issues. And because research on cultural adaptations necessitates a thoughtful consideration of cultural issues, increased research in this area is likely to bring to light unexamined concepts and variables that will push forward the field as a whole. Ultimately, the field of psychology has no choice: if we wish to remain relevant in an increasingly multicultural world, we must more thoughtfully take culture into consideration in the development, evaluation, and dissemination of therapeutic interventions so they are appropriate for the diverse groups who seek our services.

**References**


