

A Critical Review of Culturally Sensitive Treatments for Depression: Recommendations for Intervention and Research

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Recent meta-analyses and reviews have showed that culturally adapted mental health interventions are more effective for racial and ethnic minorities than traditional unadapted psychotherapy. Despite the advances in providing culturally sensitive mental health services, disparities among racial and ethnic minorities still exist. As a body of literature on culturally sensitive treatments accumulates, there is a need to examine what makes a treatment for specific presenting problems culturally sensitive. This article presents a critical review of existing culturally sensitive treatments for depression because it is one of the most common and debilitating mental disorders. In particular, we examined what treatment modalities were used, what types of adaptations were implemented, and what populations were targeted. The conceptual framework this review uses to categorize existing culturally sensitive treatments includes a top-down, a bottom-up, or an integrative approach. The review reveals that the majority of culturally sensitive treatments for depression employed an evidence-based bottom-up approach, which involved general and practical adaptations, such as translating materials or infusing specific cultural values. Most studies used cognitive-behavioral strategies and included Latinos and African Americans. Recommendations and future directions in interventions and research are discussed to decrease mental health care disparities among ethnic minorities.

Keywords: culturally sensitive treatment, culturally adapted treatment, depression, racial/ethnic minorities, adaptation, therapy

Depression is among the most debilitating disorders and largest contributors to the world's global burden of disease (World Health Organization [WHO], 2008). Therefore, it has been of paramount importance to find effective psychosocial treatments for depression and examine what treatments work for whom (Norcross & Wampold, 2011). Previous reviews of psychosocial treatments with ethnic minorities (Huey & Polo, 2008; Miranda et al., 2005) and meta-analyses (Benish, Quintana, & Wampold, 2011; Griner & Smith, 2006; Smith et al., 2011) have examined the overall effectiveness of cultural adaptations in various treatments targeting multiple disorders. In particular, cultural adaptations appear to be more effective than no treatment ($d = 0.58$), treatment as usual ($d = 0.22$) or unadapted psychotherapy ($d = 0.32$; Benish et al., 2011; Huey & Polo, 2008) and show moderately strong benefit from pre- to post- intervention ($d = 0.45$; Griner & Smith, 2006). As depression is one of the most prevalent and incapacitating mental disorders and mental health professionals strive to provide adequate depression treatment to all patients, it is important to examine in depth the culturally sensitive treatments for depression in the United States.

Since the existing evidence-based treatments (EBTs) in the United States are infused with Western norms, researchers need to

determine whether such treatments are equally effective for other populations (e.g., ethnic minorities or nationals of other countries) or whether new culturally sensitive treatments are necessary (Bernal & Domenech Rodríguez, 2012; Gone, 2009). In the last decade, several studies explored the development and implementation of culturally sensitive treatments (CSTs) for depression for different ethnic groups. However, this growing body of literature has not been reviewed and analyzed. The goal of this article is to provide a critical review of the literature on culturally sensitive treatments for depression and to establish what makes a depression treatment culturally sensitive, how effective such treatments are, and what populations CSTs targeted. Conceptually, this review examines the existing culturally sensitive treatments using a top-down approach or surface adaptations, a bottom-up approach or deep adaptations, and an integrative approach or a combination of top-down and bottom-up approaches. In the final section, we offer recommendations for future research and implementation of CSTs for depression with the goal to reduce mental health disparities among culturally diverse groups.

CSTs entail "the tailoring of psychotherapy to specific cultural contexts" (Hall, 2001, p. 502). Bernal and Domenech Rodríguez (2012) examined cultural adaptations within the framework of evidence-based practice. The authors discussed the relationship between psychotherapy and culture, which can range from "invisible" or "absent" to "inseparable" or "intertwined" (Bernal & Domenech Rodríguez, 2012, p. 4). Multiple terms have been used to describe the variability and gradation in the relationship between culture and psychotherapy, such as "culturally adapted, anchored, appropriate, centered, competent, congruent, informed, relevant, responsive, and sensitive" (p. 4). For example, the term

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culturally embedded implies the strongest relationship such that psychotherapy is considered an integral part of the context, whereas *culturally adapted* suggests systematic changes to the protocol of an existing treatment in order to make features of the treatment relevant to the culture of the target population. More specifically, cultural adaptation is “any modification to an evidence-based treatment that involves changes in the approach to service delivery, in the nature of therapeutic relationship, or in components of the treatment itself to accommodate the cultural beliefs, attitudes, and behaviors of the target population” (Whaley & Davis, 2007, pp. 570–571). The term *culturally sensitive* is used in this review to indicate varying degrees of integration of culture in psychotherapy, which may range from culturally embedded psychotherapy to one or two specific cultural adaptations, such as changing the language or hiring bicultural staff.

Culture, Race, Ethnicity, and Disparities in Service Utilization Among Ethnic Minorities

In the last two decades, there has been an increased awareness of the influence of culture on psychopathology and psychotherapy (Leach & Aten, 2010; López & Guarnaccia, 2000). Working definitions of race, ethnicity, and culture are provided below as these concepts are often used interchangeably (Betancourt & Lopez, 1993). Race refers to similar observable physical characteristics, such as skin color, hair type and color, eye color, and facial features. It often implies biological variation as the physiognomic features specific to one race are associated with populations within isolated geographic locations (Betancourt & Lopez, 1993). Ethnicity usually refers to groups that share characteristics, such as nationality, language, history, traditions, race, and/or culture. Typically, ethnic characteristics occur simultaneously with race and culture, which may contribute to the common interchangeable use of these terms.

Culture refers to “highly variable systems of meanings, which are learned and shared by a people or an identifiable segment of a population” (p. 630; Betancourt & Lopez, 1993; Rohner, 1984). Psychologically relevant elements that constitute culture represent “social norms, roles, beliefs, and values” (Betancourt & Lopez; p. 630) and may include topics, such as familial roles, gender roles, communication styles, affective styles, values of authority or personal control, individualism, collectivism, and spirituality among others (Betancourt & Lopez). These culturally relevant elements may influence how people report and conceptualize their experience of distress, determine if they seek and/or stay in treatment as well as their treatment outcome (U.S. Department of Health and Human Services [DHHS], 2001).

Data from the Collaborative Psychiatric Epidemiology Surveys revealed that lifetime prevalence rates of depression among U.S. racial and ethnic groups varied. Approximately 13.5% of Hispanics, 11.4% of Native Americans, 10.8% of non-Hispanic Blacks, 17.9% of non-Hispanic Whites, and 9.1% of Asian Americans met criteria for major depressive episode (Beals et al., 2005; Breslau et al., 2006; Takeuchi, Hong, Gile, & Alegría, 2007). Researchers have found significant disparities in depression treatment among ethnic minorities in the United States despite the similar or lower prevalence rates of depression compared to non-Hispanic Whites (Alegría et al., 2008; Harman, Edlund, & Fortney, 2004). In a nationally representative sample, Alegría et al. (2008) identified

significant ethnic differences in utilization of mental health services among people diagnosed with past-year depressive disorder, with 63.7% of Latinos, 68.7% of Asians, and 58.8% of non-Hispanic Blacks, compared with 40.2% of non-Hispanic Whites, failing to access services. Moreover, there were disparities in the likelihood of both having access to and receiving adequate care for depression for Asian Americans and non-Hispanic Blacks in contrast to non-Hispanic Whites. These findings are consistent with the disparities in service utilization reported in the supplement to the U.S. Surgeon General Report *Mental health: Culture, race, and ethnicity* (U.S. DHHS, 2001). The supplement provided an overview of the limited mental health research with ethnic minorities and described the lack of information as a “critical disparity” (p. 159, U.S. DHHS, 2001).

Evidence-Based Treatments and Culturally Sensitive Treatments

The recognition of mental health service utilization disparities and the scarcity of research on psychological treatments with ethnic and racial minority populations necessitated the careful examination of all available information in this field. Two major reviews of psychosocial treatments with ethnic minority youth and adults (Huey & Polo, 2008; Miranda et al., 2005) concentrated on answering the question of whether or not EBTs that have been predominantly tested with White middle-class English-speaking clients can generalize to ethnic minorities. Evidence-based treatments (EBTs) refer to “the interventions or techniques (e.g., cognitive-behavioral therapy for depression, exposure therapy for anxiety) that have produced therapeutic change in controlled trials” (Kazdin, 2008, p. 147). Since the majority of “possibly efficacious” EBTs have been developed and tested primarily with White, middle-class, English-speaking women, mental health professionals have questioned their efficacy with ethnic minorities (Bernal & Scharón-del-Río, 2001; Miranda et al., 2005).

Based on a limited number of EBT studies the earlier review concluded that cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT) are effective for African Americans and Latinos (Miranda et al., 2005). In the second review, Huey and Polo (2008) focused on the effectiveness of evidence-based treatments for ethnic minority youth and found that based on Chambless and Hollon’s (1998) criteria there were no “well-established” treatments. Yet, the review suggested that there were some “probably efficacious” and “possibly efficacious” treatments for anxiety-related problems, attention-deficit/hyperactivity disorder, depression, conduct problems, substance abuse problems, and trauma-related syndromes.

Both review papers concluded that the existing EBTs that have been tested with ethnic minorities showed promising results. However, these reviews included both traditional EBTs and culturally sensitive or adapted EBTs with ethnic minorities (e.g., Kohn, Oden, Muñoz, Robinson, & Leavitt, 2002; Rossello & Bernal, 1999). Combining both types of treatments in reviews or analyses may be problematic because it would be difficult to determine if the treatment outcome is associated with the traditional treatment or the culturally sensitive elements.

In the last decade, a growing number of CST studies adapted EBTs (e.g., Kohn et al., 2002) or developed treatments for specific populations with the help of focus groups (e.g., Stacciarini, 2008).

At the same time, a prominent debate in the field of CSTs has been whether EBTs should be adapted or not (Atkinson, Bui, & Mori, 2001; La Roche & Christopher, 2008). Some researchers believe that EBTs should be used in their original form to preserve their fidelity, others find a middle ground by proposing cultural adaptations to existing treatments, and yet others believe that culture cannot be artificially added and culturally sensitive treatments should be generated from specific cultural groups (La Roche & Christopher, 2008).

In an attempt to categorize the existing culturally sensitive treatments, Cardemil (2008) offered an organizing framework for CSTs that listed three perspectives with their respective advantages and limitations. The first perspective states that CST is the product of culturally sensitive therapists. The second perspective views CSTs as culturally adapted EBTs. The last perspective proposes that CSTs make culture the central focus and main principle in developing the treatment and such approaches are usually described as *culturally centered* (Bernal & Domenech Rodríguez, 2012). Thus, according to the second and third perspectives, CSTs can encompass cultural adaptations of existing treatments as well as newly developed treatments for specific groups of color (Hall & Yee, 2013).

Various researchers have questioned whether it is possible to have evidence-based treatments that are also culturally sensitive (Atkinson, et al., 2001; Bernal & Scharron-del-Rio, 2001; Hall, 2001; La Roche & Christopher, 2008). Therefore, an important question that remains is whether culturally diverse groups would benefit more from culturally sensitive interventions than from unadapted EBTs.

In support of this idea, Griner and Smith (2006) examined the benefit of evidence-based culturally adapted mental health interventions. A meta-analysis of 76 studies found an average treatment effect size ($d = .45$) from pre- to postintervention, which indicated a moderately strong benefit of culturally adapted interventions. In addition, Griner and Smith found that treatments for groups of same-race participants were four times more effective ($d = .49$) than treatments for groups of mixed-race participants ($d = .12$). This finding suggests that cultural adaptations for specific groups may be more beneficial than general multicultural adaptations. Another important finding was that effect sizes of culturally adapted treatments increased when participants were older and when there was a higher percentage of Hispanic participants. The authors attributed the greater benefits of cultural adaptations for these populations to the impact of acculturation suggesting that older populations may be less acculturated than younger populations and some Hispanic populations that do not speak English may be less acculturated. In addition, when the therapist spoke the participants' native language (if not English), the treatment effect was larger ($d = .49$) than when the therapist did not speak the participants' native language ($d = .21$). A logical next step is to review the nature of the cultural adaptations and test if they contribute to the already existing treatments.

Smith, Domenech Rodríguez, and Bernal (2011) reviewed existing definitions and means for culturally adapting psychotherapy and provided clinical examples of adapted "traditional" Western treatments. The authors conducted a meta-analysis that included 8,620 participants from 65 studies and concluded that the culturally adapted treatments had a moderate effect ($d = .46$). In addition, Smith et al. (2011) suggested that the most effective treat-

ments were those with greater numbers of cultural adaptations. However, none of the existing reviews has primarily focused on the specific adaptations or elements that would make a treatment culturally sensitive for a particular disorder.

Cultural Adaptations: Frameworks and Models

Domenech Rodríguez and Bernal (2012) traced the beginning of cultural adaptation models within positivist approaches to therapy, which emphasize "systematic observation and scientific discovery" (p. 23). The authors provided a thorough review of 11 broad frameworks or models for cultural adaptation. Several of these frameworks were used for culturally sensitive depression treatments.

The Multidimensional Model for Understanding Culturally Responsive Psychotherapies (Koss-Chioino & Vargas, 1992) proposed two dimensions of psychotherapy: culture and structure. The dimension of culture included cultural content and cultural context and the dimension of structure consisted of process and form. Kohn et al. (2002) used a framework that resembled this one to culturally adapt a CBT for African American women.

Another framework that has been used in a number of culturally sensitive treatments is the Ecological Validity Framework (EVF; Bernal, Bonilla, & Bellido, 1995). It consists of eight areas of an intervention that may be culturally adapted. Language refers to culturally relevant oral and written forms of communication (e.g., translation, specific jargon). The persons dimension captures the client-therapist dyad dynamics (e.g., ethnic match). Metaphors include expressing ideas in culturally relevant visual and verbal forms (e.g., role models, sayings). Content refers to attending to the client's values, traditions, and interpersonal styles (e.g., *familismo*, *simpatia*). The concepts about the treatment, the treatment goals, and the treatment methods also need to be consistent with the cultural values and expectations of the client. Finally, the context is taken into consideration in the assessment and intervention (e.g., acculturation, country of origin, family constitution, etc.). At least three studies used the EVF (Nicolas, Arntz, Hirsch, & Schmiedigen, 2009; Rossello & Bernal, 1999; Rossello, Bernal, & Rivera-Medina, 2008) to adapt existing cognitive-behavioral and interpersonal treatments for depression for Haitian and Puerto Rican adolescents.

Theoretically, this review examines the existing culturally sensitive treatments using a top-down, a bottom-up, or an integrative approach. In this case, top-down refers to cultural adaptations to an established treatment to make it sound and look more compatible to the population of interest (e.g., translate materials to the language of the client, train staff to be warmer in interpersonal interactions). These types of adaptations may be similar to Resnicow et al.'s (2002) "surface adaptations." Alternatively, bottom-up refers to "deep adaptations" that consider contextual factors influencing behavior (e.g., historical, political, and sociocultural contexts) and often involve collaboration with the potential recipients of the treatment in the form of focus groups or qualitative research. An integrative approach refers to the use of both top-down and bottom-up adaptations and may include the use of a specific cultural adaptation framework. Although Hwang (2006, 2009) proposed a framework titled Integrating Top-Down and Bottom-Up Approach in Adapting Psychotherapy, the use of the terms "top-down" and "bottom-up" in this review does not include

all of the elements that Hwang listed. Additionally, this review utilizes Leong's Cultural Accommodations Model (CAM; Leong & Lee, 2006) to discuss the findings and formulate future recommendations for research and practice.

The primary goal of this article is to review the body of literature on culturally sensitive treatments for depression and answer several questions that are important for the understanding and evaluation of these treatments and relevant to addressing existing disparities:

- 1) What makes a treatment for depression culturally sensitive?
- 2) What types of existing treatments for depression have been adapted and/or tested (e.g., theoretical background; individual/family/group) and what are the outcomes?
- 3) What types of clients are these treatments targeting (e.g., age, SES, ethnicity/race)?
- 4) What possible recommendations for future research can be made?

Literature Review Method

Peer-reviewed articles examining culturally sensitive depression treatments were identified using the PsycInfo database in December 2012. Keywords and subject terms included *depression*, *depressed*, *treatment*, *therapy*, *psychotherapy* in conjunction with *adaptation*, *culturally adapted*, *culturally sensitive*, *multicultural*, *culture*, *ethnicity*, *race*, and *ethnic minority*. In addition, published meta-analyses (Benish et al., 2011; Griner & Smith, 2006; Huey & Polo, 2008; Smith et al., 2011) and review articles (Horrell, 2008; Miranda et al., 2005) of psychosocial treatments with ethnic minorities or nonmainstream populations were reviewed and relevant studies were drawn. The first author (ZK) conducted the literature search and reviewed the search results. Articles included in this review 1) focused on culturally sensitive treatments for depression, 2) mentioned at least one element in the treatment related to the clients' culture, and 3) described the cultural adaptation or framework used in the treatment. Culturally sensitive prevention programs for depression were excluded. We identified 16 studies of culturally sensitive treatments for depression based on these inclusion/exclusion criteria presented in Table 1.

Results

Elements of Culturally Sensitive Treatments for Depression

Some of the studies adapted specific elements using a top-down approach (e.g., Dai et al., 1999), whereas others used frameworks and/or bottom-up and integrative approaches to create new treatments (e.g., Nicolas et al., 2009; Stacciarini, 2008). Frequent top-down adaptations included hiring bilingual and bicultural providers, offering all materials in the language of the group (e.g., Spanish, Mandarin), and adapting the materials and exercises to be culturally appropriate. All studies that included Spanish-speaking populations emphasized the importance of cultural values, such as

respeto and *simpatia*, and instructed the staff to be warmer and more personalized in their interactions with Spanish-speaking patients (Kanter et al., 2010; Miranda, Azocar et al., 2003).

The Ecological Validity Model (Bernal et al., 1995) guided the cultural adaptations in a few of the culturally sensitive treatments for depression reviewed in this paper (Nicolas et al., 2009; Rossello & Bernal, 1999; Rossello et al., 2008). Thus, these treatments included systematic adaptations in the eight broad areas listed in Bernal et al. (1995). The structure/process and content adaptations that Kohn et al. (2002) described resembled the terminology from Koss-Chioino and Vargas' (1992) framework.

Some of the bottom-up approaches included generating focus groups with stakeholders (Stacciarini, 2008), interviews with providers who work with the population of interest (Naeem et al., 2011), and development of partnerships with the community (Nicolas et al., 2009). Often the qualitative data generated from these bottom-up approaches would be later integrated with preexisting elements of the treatment (e.g., treatment modules). However, some researchers could choose to reinvent the entire treatment by creating new treatment modules based on the collected qualitative information.

Whereas some studies provided rationale for the cultural adaptations they made, others simply described them. For example, Nicolas et al. (2009) described elaborately every step of the cultural adaptation process and the reasoning behind it. Some of the suggested changes that emerged from the focus groups (i.e., bottom-up approach) included: integration of other theories besides CBT theory that explained the etiology of depression (i.e., integrative approach); the inclusion of metaphors, language, and examples that are relevant to the life of Haitian adolescents; and the unfamiliarity with some of the homework assignments and activities, such as active listening. Based on the feedback, Nicolas and colleagues proceeded to make a second wave of adaptations. Such multistage adaptations of treatments show the reasoning behind every action and are important in creating an ecologically valid intervention that integrates the community's opinions. Nicolas et al. only provided a description of their detailed adaptation process but did not have data available to show how the culturally adapted treatment was received by the target group.

Characteristics of Culturally Sensitive Treatments for Depression

Thirteen of the 16 culturally sensitive treatments for depression reviewed in this article were cognitive-behavioral in nature. Two studies provided case management (Miranda, Azocar et al., 2003; Yeung et al., 2010) and one (Ngo et al., 2009) tested a quality improvement intervention in a primary care setting. A couple of studies (Chavez-Korell et al., 2012; Kanter et al., 2010) used behavioral activation which is similar to the behavioral component of CBT. Two studies adapted problem solving therapy (Chavez-Korrel et al.; Chu et al., 2012) for older adults, which is also based on a CBT framework. Only two of the 16 studies (Rossello & Bernal, 1999; Rossello et al., 2008) tested individual and group interpersonal therapy (IPT). There were no differences between the individual IPT and CBT outcomes, as it has been previously found (Elkin et al., 1989). However, the Group CBT yielded better results than the Group IPT (Rossello et al., 2008).

Table 1
Culturally Sensitive Treatments for Depression

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Chavez-Korell et al. (2012)	186	Latino elders	8–12-session individual PST and BA	1) Making the treatment feasible for a community setting to improve Latino elders' access, retention, and outcomes; 2) Adapting/translating all materials and conducting all services in Spanish; 3) Adapting materials for populations with low or no literacy; 4) Decreasing the ratio of providers and clients; and 5) Engaging in culturally sensitive and appropriate treatment activities. In particular, Latino values of <i>familismo</i> , <i>personalismo</i> , <i>respeto</i> , <i>dignidad</i> , <i>espiritualidad</i> , <i>machismo</i> , and <i>marianismo</i> were thoughtfully used in treatment conceptualization, planning, and intervention; Emphasis on warm and personal interactions	6 (3.3%)	180 (96.7%)	N/A	Outcome data revealed significant decrease in depression symptoms with 56.15% (73 of 130) of participants presenting with 50% or greater reduction in depressive symptoms in 6 months and 63.22% (55 of 87) of participants presenting with 50% or greater reduction in 12 months.
Chu et al. (2012)	1	Chinese American elderly	12-session individual PST	Five recurrent themes of cultural modifications were developed from stakeholder feedback, literature review, and pilot testing: 1) A need for flexibility; 2) Psychoeducation and destigmatizing language; 3) Managing expectations of the provider-client relationship: hierarchy, respect, case management, and providing suggestions; 4) Visual aids and measurement; and 5) Acculturative processes	N/A	N/A	N/A	Remission of clinical depression ($n = 1$)

(table continues)

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Dai et al. (1999)	39 (randomized)	Chinese American elderly	8-session group CBT/educational group and control group (n = 30)	Conducted in Chinese by bilingual and bicultural therapists	7 (23%; experimental group); 2 (22%; control group)	23 (77%)	N/A	Experimental group showed improvement in overall depressive symptoms over time compared to the control group.
Interian et al. (2008)	15	Hispanics, 93% female (low-income, Spanish speaking)	12-session individual CBT	<p>Provided in Spanish; Included ethnographical assessment evaluating cultural factors that may contribute to depression; Emphasized warm and positive interactions and cultural values such as <i>respeto</i>, <i>simpatia</i>, and <i>poniendo de su parte</i> (doing everything possible to help or succeed); Language considerations included the use of phrases that are commonly used for therapeutic phenomena (<i>desahogo</i>, getting things off one's chest, and <i>distraction</i>, distraction) and <i>dichos</i> (sayings); Special attention given to <i>familismo</i> (e.g., client's improvement will contribute to family's improvement in family functioning); Provided in primary care; Paid special attention to somatic complaints and how to address them with therapeutic techniques (e.g., relaxation, sleep hygiene)</p>	4 (27%)	11 (73%)	$d = 2.71$ (posttreatment); $d = 2.53$ (follow-up)	Participants reported a significant reduction in depression symptoms (57%) at posttreatment and retained the improvement at the 6-month follow-up (54% reduction from baseline).

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Kanter et al. (2010)	10	Latina women in the U.S.	12-session individual BA	Inclusion of free, low-cost, and culturally sensitive activation targets (e.g., walking, attending community activities, such as local festivals and recreational groups, going to church, borrowing fitness DVDs from the library, going to the park); Incorporation of Latino-specific values and beliefs (<i>familismo</i> , <i>personalismo</i> , <i>marianismo</i> , and <i>machismo</i>) and attention to their effect on activation; Addition of specific strategies to address treatment engagement and retention in the first session; Invitation to include family members in the treatment; Family, social, and community resources utilized to the extent possible. Translated materials; Bilingual and bicultural staff	4 (40%)	6 (60%)	$d = 1.67$ for completers; $d = 1.07$ for intent-to-treat	60% of participants achieved remission at the end of treatment

(table continues)

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Kohn et al. (2002)	10	African American low-income women	16-session group CBT	Structure/process adaptations: only African American women; closed group to facilitate cohesion; experiential meditative exercises at the beginning of each session and a termination ritual; changes in the language. Content adaptations (four modules): deconstructing the "Black superwoman" myth; exploring spirituality and religiosity; reinforcing importance of family; discussing African American female identity and empowerment	2 (20%)	8 (80%)	N/A	When compared with demographically matched women, the decrease of depressive symptoms in the culturally adapted group was twice larger than that in the regular CBT group (-12.6 vs. -5.9 points on the BDI).
Miranda, Azocar, et al. (2003)	199 (randomized)	African American, Latino low income PCPs	12-session group CBT vs CBT + case management	Bilingual and bicultural providers; Materials in Spanish, Training staff to show <i>respeto</i> and <i>simpatia</i> ; Warmer interactions; Lower reading level; Pleasant activities free	23 (30%) of Spanish-speaking patients: 16 (40%) of CBT alone and 6 (17%) of CBT + DCM; 44 (36%) of English-speaking patients: 27 (44%) of CBT alone and 17 (28%) of CBT + DCM	70% of Spanish-speaking patients; 64% of English-speaking patients	N/A	The Spanish- and English-speaking patients responded equally well to cognitive-behavioral therapy alone. Fewer depressive symptoms noticed only for Spanish speaking clients in CBT + case management.

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Miranda, Chung, et al. (2003)	267 (randomized)	African American ($n = 117$), Latino ($n = 134$) low income women	8-session CBT	Bilingual providers; Manual and materials in Spanish; Spanish-speaking staff; Psychotherapists and nurse practitioners experienced and committed to working with low-income minorities	N/A	48 (53%) received 4 or more CBT sessions	N/A	The psychotherapy intervention was not superior to community referral in decreasing depressive symptoms ($p = .32$) or improving role functioning ($p = .58$), but did result in improved social functioning ($p = .06$). In a RCT, the authors compared a 9-session CBT + antidepressants ($n = 17$) and antidepressants + usual care ($n = 17$) and observed significant improvement in depressive, anxiety, and somatic symptoms among patients who received CBT.
Naeem et al. (2011)	34 (randomized)	Pakistani adults	9-session individual CBT + antidepressant ($n = 17$) and control ($n = 17$)	Used qualitative data from clinical psychologists about their experience providing CBT to depressed patients and barriers in therapy; Collected information about symptoms, referral behavior, attribution styles, and acceptability of therapy from 9 depressed patients; Next, conducted focus groups with college students using the "name the title" technique to obtain equivalent idiomatic phrases without translating the terminology in Urdu first; Therapists focused on physical symptoms; Urdu equivalents of CBT jargon; Appropriate homework; Attendance of a family member; Folk stories and examples of the life of Prophet Muhammad and Quran used	3 (18%) attended fewer than 6	14 (82%)	$d = .60$	

(table continues)

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Ngo et al. (2009)	325	African American ($n = 59$), Latino ($n = 224$) and White ($n = 42$) low-income adolescents	Quality improvement intervention (included CBT or care management)	Training staff on cultural sensitivity issues; Tailoring examples to fit the cultural context of each youth and family; Bilingual case managers; Attending to cultural issues (e.g., authority of elders, <i>simpatia</i>)	N/A	N/A	N/A	The authors concluded that Black youth in QII experienced significant reduction in depression symptoms and use of mental health services at 6-month FU and Latino youth reported greater satisfaction with QII than usual care.
Nicolas et al. (2009)	N/A	Haitian American adolescents	16 two-hour sessions in groups of 5–10 participants; Group CBT (development)	Used community focus groups to develop treatment based on the ecological validity model (Bernal et al., 1995); The cultural adaptation process of ACDC included the creation of an advisory board, developing partnership with the community, training the focus group leaders, conducting focus group sessions with Haitian adolescents, and integration of the focus group data to modify the treatment; Not tested	N/A	N/A	N/A	N/A

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Rossello & Bernal (1999)	71 (randomized)	Puerto Rican adolescents; 54% female	CBT ($n = 25$), IPT ($n = 23$) or waitlist ($n = 23$); 12 one-hour individual sessions (CBT, IPT)	Based on ecological validity and cultural sensitivity model (Bernal et al., 1995); Translated instruments; Adapted treatment manuals to both developmental and cultural sensitive criteria; Integrated and emphasized ideas important in Puerto Rican culture such as <i>familismo</i> , <i>simpatia</i> , <i>respeto</i> , parental authority, present time orientation, and socioeconomic context; Took into consideration cultural aspects of the treatments that consider the “interpersonal” aspects of the Latino culture.	Control 5 (22%), IPT 4 (17%) and CBT 4 (16%)	68% of IPT and 52% of CBT participants completed treatment	($d = .73$ for IPT and $d = .43$ for CBT)	Participants in the CBT ($n = 25$) and IPT ($n = 23$) group showed a significant decrease in depressive symptoms compared to the waitlist group with moderate effect sizes ($d = .73$ for IPT and $d = .43$ for CBT).

(table continues)

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Rossello et al. (2008)	112 (randomized)	Puerto Rican adolescents in Puerto Rico	12-session individual CBT ($n = 23$), group CBT ($n = 29$), individual IPT ($n = 31$), or group IPT ($n = 29$)	Based on ecological validity and cultural sensitivity model (Bernal et al., 1995); Same as Rossello & Bernal (1999); Adapted group manuals using the cultural adaptation model	1 (4.3%); individual CBT, 1 (3.4%); group CBT, 3 (9.6%); individual IPT, and 1 (3.4%); group IPT	95.7% (CBT individual); 96.6% (CBT group); 90.4% (IPT individual); 96.6% (IPT group)	Individual vs. Group was $d = .18$, individual therapy better by 54% than group therapy; CBT vs. IPT $d = .43$, patients in CBT better than IPT	Both IPT and CBT in their individual and group format performed well. However, CBT (combined group and individual) resulted in significantly greater decreases in depressive symptoms, changes in self-concept, and reduction in internalizing and externalizing behaviors in comparison to IPT (combined group and individual). N/A
Stacciarini (2008)	16	Puerto Rican women in the U.S.	Community-based group intervention (development)	Focus groups yielded the following categories: family and community values, mainland/non-mainland cultural variances, communication style, religion, education and occupational variances, health beliefs, Puerto Rican traditions, emotions, and coping skills.	N/A	N/A	N/A	N/A

Table 1 (continued)

Study	Participants	Demographics	Treatment condition (# of sessions and duration)	Culturally sensitive elements	Dropped out	Retention	Effect size	Outcome
Wong (2008)	96 (randomized)	Chinese adults in Hong Kong, 22% male	10-week group CBT vs. waitlist control	Translation of all terminology to colloquial expressions, modification of dysfunctional rules in relation to family and interpersonal relationships, active involvement of group leaders, and the delivery of mini-lectures about the exercises and worksheets to increase structure and problem-focused approach.	0 (0%); experimental, 8 (20%); control)	100%	C-BDI $d = .76$, COPE $d = .57$, DAS $d = .88$, and negative emotions $d = .59$ between the experimental and control group	The participants in the experimental group showed a significant decrease in the severity of depression symptoms, negative emotions, and dysfunctional beliefs and better coping skills in comparison with the control group.
Yeung et al. (2010)	100 (randomized)	Chinese American adults	Usual care or management (1 in-person meeting, 7 calls over 24 weeks)	CSCT involves a culturally sensitive psychiatric interview, which consists of a standard psychiatric interview and a cultural component that uses Kleinman's questions to explore patients' illness beliefs; Information about depression introduced in ways compatible with patients' beliefs	N/A	N/A	N/A	The two conditions did not differ significantly. Yeung et al. concluded that the CSCT improved the recognition and treatment engagement of depressed Chinese Americans.

Note. ACDC = Adolescent Coping with Depression Course; BA = behavioral activation; CBT = cognitive behavioral therapy; CSCT = culturally sensitive collaborative treatment; DCM = depression care manager; IPT = interpersonal therapy; MDD = major depressive disorder; PCP = primary care patients; PST = problem-solving therapy; QII = quality improvement intervention.

Seven of the adapted treatments were offered in a group format. Only one of the studies (Kohn et al., 2002) indicated that the group was closed after the start of the group, although it appeared that other group treatments worked similarly (Dai et al., 1999; Rossello et al., 2008) but it was not clear if the closed group format would be preserved in a nonresearch setting. Depending on the format of the treatment (individual or group), the duration varied between 8 and 16 sessions (between 60 and 120 minutes per session). Overall, dropout rates for CSTs were low (ranged from 0% to 40%), which resulted in relatively high retention rates (from 60% to 100%) for the culturally sensitive treatment conditions.

The majority of the reviewed CSTs for depression revealed medium to large effect sizes for pretreatment to posttreatment ($d = 2.71$ post treatment in Interian et al., 2008; $d = 1.67$ for completers in Kanter et al., 2010). Two studies compared a CST condition to a control condition and also found evidence for medium effect sizes in favor of the CST ($d = .73$ for CBT and $d = .43$ for IPT vs. control in Rossello & Bernal, 1999; $d = .76$ for adapted CBT vs. control in Wong, 2008). Another study found that culturally adapted CBT in combination with antidepressants yielded better results than antidepressants only ($d = .60$; Naeem et al., 2011). Finally, Rossello et al. compared group and individual CBT and group and individual IPT and discovered that individual treatments performed slightly better than group treatments ($d = .18$) and culturally adapted CBT performed better than culturally adapted IPT ($d = .43$).

Participant Characteristics

The participants in five of the reviewed studies were low-income individuals, and there was a wide range of age groups. Three studies (Kohn et al., 2002; Miranda, Chung et al., 2003; Stacciarini, 2008) focused on therapy for depressed women only. Even studies that did not plan on limiting the recruitment to women enrolled predominantly female participants (93%; Interian et al., 2008; 100%; Kanter et al., 2010). Three of the reviewed studies developed culturally sensitive treatments for older adults and four concentrated on adolescents.

In terms of ethnicity and race, Hispanics and African Americans were most studied; three studies assessed a culturally adapted depression treatment for Asian Americans (Chu et al., 2012; Dai et al., 1999; Yeung et al., 2010), and we located no study that examined a CST for depression for Native Americans. Two international studies examined culturally adapted depression treatments in Hong Kong and Pakistan. In addition, the treatments were provided in a number of settings varying from primary care (Interian et al., 2008) to outpatient hospital clinics (Miranda, Azocar et al., 2003). Generally, the existing culturally sensitive treatments were diverse in serving different age groups and targeting populations at risk for depression.

All of the reviewed studies that provided data found significant decreases in depressive symptomatology posttreatment. However, none of the studies examining these culturally sensitive treatments has empirically assessed directly the specific role of the adaptations. Kohn et al. (2002) used a comparison group of demographically matched participants to compare the reduction in depressive symptoms among African American women in the culturally adapted CBT and the traditional CBT and found that the decrease of symptoms was doubled in the culturally adapted CBT group.

Chavez-Korell et al. (2012) reported that IMPACT had been used in its unadapted form with Latino elders in the past and was found as effective as it was for the overall population. Apart from these studies, there is little evidence to support that the cultural adaptations are the main mechanism responsible for the favorable outcomes. Nonetheless, all studies had relatively high retention (over 60%) and high social and ecological validity.

Discussion

We identified 16 studies that met inclusion criteria for culturally sensitive treatments for depression. The studies widely varied in the description and assessment of cultural adaptations. The majority of the reviewed CSTs were behavioral or cognitive-behavioral in nature. This finding may not be surprising since CBT is considered an EBT for depression (Chambless et al., 1998). In addition, Domenech Rodríguez and Bernal (2012) pointed out that within a pragmatist paradigm, cultural adaptation models were predominantly developed to work with behavioral and cognitive-behavioral interventions.

Several of the CSTs for depression were in a group format. Group therapies may be advantageous because they are more cost-effective, provide care for more people, and encourage close relationships and support among group members. However, the group format may be troublesome for people whose cultural values relate to stigma of mental disorders and may be especially unpopular in small communities, where people may know each other. Alternatively, a few studies used culturally adapted treatments in an individual therapy format (Interian et al., 2008; Kanter et al., 2010; Rossello & Bernal, 1999). It may be easier to make cultural adaptations in the process of individual therapy given that most culturally competent therapists are likely to do some adaptations already. However, if such adaptations in individual therapy were made but not documented, it may be difficult to assess their effectiveness.

At the same time, Muñoz and Mendelson (2005) suggested that changes in existing interventions for depression should invite ethnic minority involvement in development, include cultural values particular to the ethnic group, incorporate spirituality and religion if relevant, take into account the clients' acculturation level, address race, prejudice, and discrimination, and offer strategies to empower the clients. The inclusion of community members in the process of adapting or developing a treatment is of utmost importance if the researcher wants to attract and retain participants. However, only three of the reviewed studies had invited community members to assist them in the adaptation (Chu et al., 2012; Nicolas et al., 2009; Stacciarini, 2008).

A number of the CSTs for depression targeted ethnic minority and low SES women. In general, low SES and being a female may be considered two of the risk factors for depression (Piccinelli & Wilkinson, 2000; Simonds, 2001). Therefore, these demographic characteristics may be overrepresented within the ethnic minority groups that have received culturally sensitive treatments for depression.

Additionally, the studies that provided data about dropout and retention rates presented a positive outlook with retention rates consistently above 60% and typically much higher. These numbers look promising considering that more than 65% of clients terminate psychotherapy before the 10th session and most clients attend

fewer than 6 sessions (Barrett et al., 2008). Moreover, the studies that provided effect sizes also suggested that clients' depressive symptoms significantly improve from pre to post treatment and compared to a control group.

Recommendations for Intervention

Our recommendations for intervention from this review can be framed within the Cultural Accommodation Model (CAM) of psychotherapy (Leong & Lee, 2006), which involves three steps: "(a) identifying the cultural gaps or cultural blind-spots in an existing theory that restricts the cultural validity of the theory, (b) selecting current culturally specific concepts and models from cross-cultural and ethnic minority psychology to fill in the cultural gaps and accommodate the theory to racial and ethnic minorities and culturally diverse populations, and (c) testing the culturally accommodated theory to determine if it has incremental validity above and beyond the culturally unaccommodated theory" (Leong & Serafica, 2001; p. 185).

As a proposed model of cross-cultural psychotherapy, a key component of the Cultural Accommodation Model is to examine the cultural validity of our models of psychotherapy and to identify culture-specific elements that would fill the gaps of existing models and enrich their utility and effectiveness with culturally diverse clientele (Leong & Kalibatseva, 2011). Furthermore, the CAM recognizes the importance of using the person-environment interaction models rather than focusing only on the person and ignoring the cultural context variables in the lives of these culturally diverse individuals (Leong & Kalibatseva, 2011). As a result, culturally diverse clients who experience psychotherapy as congruent with their culture may be more likely to stay in treatment and benefit from it.

How should we evaluate the cultural validity of our models and what culture-specific elements should be selected? Relying on the individual preferences of psychotherapists (or researchers) cannot be justified. Instead, Leong and Lee (2006) proposed that in applying the CAM, the Evidence-Based Practice (EPB) approach could be utilized to both evaluate our existing models and to select culture-specific variables to research which can then be applied in clinical practice. This review followed the recommendations of the CAM to identify cultural adaptations that have been successful in depression treatments. Yet, it is important to acknowledge that it is difficult to compare the cultural adaptations across studies and generalize what adaptations work best.

The studies of culturally sensitive treatment for depression reviewed in this article therefore examine the research evidence to guide the cultural accommodation process in providing treatment to culturally diverse depressed patients. This review has identified culture-specific elements in treatment that have proven to increase the effectiveness of our interventions. In this review specific to depression, we found that accommodating for language is critical. The effectiveness of bilingual therapists was found across multiple studies. It is therefore recommended that therapists carefully evaluate the language ability and needs of their depressed patients both before initiating and during the treatment process. Moreover, the cultural adaptations to most treatments indicated that simple translation may not be enough to make a treatment culturally sensitive. Thus, this recommendation expands beyond translation of materials and incorporates verbal and visual forms of communication

(e.g., metaphors, role models) that make the treatment consistent with the cultural context of the client.

Similar to Leong and Lee (2006), this review also found that culture-specific values related to interpersonal relationships, family, and spirituality can play a significant role when providing therapy to culturally diverse patients. Specifically, our review found that treatments which carefully accommodated for these differences in cultural specific values resulted in better outcomes. For example, culture-specific interpersonal values included *respeto*, *familismo*, and *simpatia* among Latino patients and religion and spirituality among African American patients. In addition, adaptations that increase the interaction of clients with health care professionals, such as care management may also yield better retention and treatment outcomes. Culturally appropriate assessment, exploration of the client's illness beliefs, and destigmatization of depression as an illness also most likely positively contribute to recruitment, retention, and positive treatment outcome (Interian et al., 2008). Although very few CSTs in this review directly discussed this issue, the concept of depression, the symptoms that typically are most bothersome, and the stigma associated with depression may be grounded within a cultural context that needs to be carefully explored. To illustrate this, neurasthenia, a popular cultural syndrome, captures a construct, which may be similar to depression among Asians. Neurasthenia (literally "lack of nerve strength") is characterized by mental or physical fatigue, and two of seven symptoms: dizziness, pain in the muscles, tension headaches, inability to relax, irritability, sleep disturbance, and dyspepsia. It still remains a popular diagnosis in China, in particular, and scholars have argued that it is commonly used because of its acceptance as a medical diagnosis that conveys distress without the stigma of a psychiatric diagnosis (Schwartz, 2002).

Finally, the treatment approaches that were used were mostly problem-focused and direct. This finding is consistent with arguments that culturally diverse individuals may struggle with open-ended and nondirective therapy (Leong, Lee, & Kalibatseva, in press). Moreover, establishing a warm and trusting relationship and discussing assumptions about hierarchy and engagement of the client in therapy were important elements in most of the culturally sensitive treatments for depression. To summarize, health care providers are strongly encouraged to consider the importance of language beyond translation, the integration of culturally salient values, beliefs, and traditions, and the understanding of etiology, symptom presentation, and stigma associated with depression when providing CSTs for depression.

Recommendations for Research

Culturally adapted treatments for depression appear effective in symptom reduction and ethnic minority clients may be more likely to seek and stay in treatment if they consider the issues discussed in therapy relevant to their culture. An important next step in this field is to compare a culturally adapted depression treatment and a depression treatment in its original form in order to find out if and how much the cultural adaptations contribute to the favorable outcomes. Future research that examines cultural adaptations as specific mechanisms for change would contribute to our understanding of the active and important ingredients of therapy that produce beneficial outcomes (Kazdin, 2007).

Based on this review, there are two likely directions for the future of CSTs: researchers will continue to adapt existing treatments by changing the process and content based on theory and previous research or they will rely more on using frameworks and community focus groups that will inform them of what to include in the treatment. Both directions seem promising as long as the adaptations are made based on sound reasoning and evidence. The utilization of focus groups to inform and guide the adaptation process may be particularly helpful when treating specific populations that have not received much attention in previous research. No matter which direction researchers choose, it is important to document every cultural adaptation and the logic behind it. Similarly, Cardemil (2010) argued that researchers need to investigate the social validity/acceptability, the efficacy, and the mechanisms of action associated with the cultural adaptations as well as changes in symptoms and levels of engagement among participants.

Other recommendations focus on the types of demographic groups that need to be targeted in the future. First, this review did not find any prior culturally sensitive treatment for depression with Native Americans. Gone and Alcántara's (2007) review of the literature on effective mental health interventions for American Indians and Alaska Natives indicated that there were two preventive studies of depression. Yet, the lack of research on depression treatments with Native Americans needs to be addressed. In addition, there was a general lack of males recruited in most of the reviewed treatments. The lower number of males may be explained by the higher likelihood of women to suffer from depression (Simonds, 2001). However, researchers have also found that men and, in particular, ethnic minority men may be less likely to seek help for depression due to existing stigma in the society and compliance to masculinity norms (Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011).

Another recommendation for research on culturally sensitive treatment would be to explore within-group differences. For example, the *DSM-IV-TR* and *DSM-5* have identified cultural identity as a central moderator when diagnosing and treating persons of color. More research is needed to delineate how these culturally sensitive treatments may need to be modified for clients with various levels of cultural identity. For example, cultural adaptations of CBT for Mexican Americans should not assume that Mexican Americans are a monolithic group. Instead, acculturation may mediate the effect of a CST, such that Mexican American depressed clients with high or low levels of acculturation may react differently to a cultural adapted model of CBT (Villalobos, 2009).

Lastly, few of the cultural adaptations addressed the concept of depression and what it means to be depressed in one's culture. In other words, the core components of the treatments that treat symptom reduction were mostly kept intact and many of the peripheral elements were adapted (e.g., Chu et al., 2012). Hence, most cultural adaptations seem to be focused on the perspective of cross-cultural psychotherapy rather than cross-cultural psychopathology. Since culture may influence the etiology, symptom expression, diagnosis, and treatment of depression (e.g., Kleinman & Good, 1985), it may be valuable to explore how one's cultural background may impact the way one thinks about what depression is and how to cure it. Therefore, an ethnographic assessment as proposed in one of the studies (Interian et al., 2008) may be an

important element to include in future culturally sensitive treatments for depression. Lastly, depression is a multidimensional construct and it may help to incorporate this idea in cultural adaptations of depression treatments (Kalibatseva & Leong, 2011). Focusing on the interpersonal and cognitive aspects of depression has been very effective but there are also somatic, affective, and existential aspects of depression that may be important to address in culturally sensitive treatments.

Based on our critical review of the literature, we have offered a series of recommendations that we hope will guide future research on culturally sensitive treatments for depression. In addition to filling the gaps identified in this set of recommendations, we also encourage a greater amount of attention to culturally sensitive measurement of depression in order to advance the field. As our assessment of treatment outcome relies on culturally sensitive assessment, the authors see these two areas as closely related.

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