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Providers' Perspectives Regarding the Development of a Web-Based Depression Intervention for Latina/o Youth

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Abstract

Latina/o youth appear to be at significant risk for depression and, of concern, is high underutilization of mental health services observed in this population. There is a tremendous need for novel intervention methods to better serve the unique needs of this population. This paper describes the development of Rise Above (*Siempre Sale el Sol*), a Web-based, self-help, depression intervention for Latina/o adolescents funded by the National Institute of Mental Health. We applied a cultural adaptation model to an evidence-based depression treatment to reduce potential service barriers and increase the relevance and potential efficacy of the intervention for Latina/o youth. We conducted thematic interviews with 32 national experts to obtain feedback that would inform our application of the cultural adaptation model, the potential efficacy of the intervention, and the feasibility of implementation. Future directions for the evaluation of Rise Above (*Siempre Sale el Sol*) are described.

Keywords

Latina/o adolescents; depression; cultural adaptation; Internet-based intervention

Depression is prevalent among adolescents (e.g., Essau, Conradt, & Petermann, 2000), with some studies suggesting that prevalence is particularly high among Latina/o youth (Costello, Swendsen, Rose, & Dierker, 2008; Twenge & Nolen-Hoeksema, 2002). This may be attributable, in part, to experiences with significant life stressors including discrimination, low socio-economic status, migration stressors, and acculturative stress (Plant & Sachs-Ericsson, 2004; Potochnick & Perreira, 2010). For example, in a study by McLaughlin, Hilt, and Nolen-Hoeksema (2007) examining racial/ethnic differences in internalizing and externalizing symptoms in adolescents, results indicated that Latinas reported higher levels of depression compared to their Black and White counterparts. Further, adolescents who experience a depressive episode are at much greater risk for developing other problems, such as anxiety disorders, oppositional and conduct problems, and substance abuse

(Lewinsohn & Essau, 2002), and are also at greater risk for suicidal ideation and attempts (CDC, 2006b). National data from the Centers for Disease Control and Prevention Youth Risk Behavior Survey (2011) indicated that Latina/o adolescents (9th through 12th grade) were significantly more likely to have reported feeling sad or hopeless (32.6%) compared to their Black (24.7%) or White (27.2%) counterparts. Similarly, Latina/o adolescents were also more likely to have made a plan about how they would attempt suicide (14.3%) compared to Black (11.1%) or White adolescents (12.1%). Successful treatment of depression among Latina/o adolescents may, therefore, produce benefits for these youth on multiple levels. However, few evidence-based, depression-focused interventions have been developed for Latina/o youth (Rosselló & Bernal, 1999; Rosselló, Bernal, & Rivera-Medina, 2008). Moreover, very little attention has been given to tailoring interventions to specific cultural groups to adequately address utilization barriers and to maximize engagement and potential benefit. One potential reason could be attributed to research demonstrating the efficacy of depression interventions for children and adolescents from various racial/ethnic backgrounds. Preliminary evidence exists for the use of evidence-based interventions for a number of mental health disorders with racial/ethnic minority populations (for review see Huey & Polo, 2008), although some concern has been expressed for the generalizability of clinical trials for culturally diverse populations (e.g., Bernal & Scharron-Del-Rio, 2001). Huey and Polo (2008) found support in their meta-analysis for the use of evidence based treatments (EBTs) in treating depression and other psychosocial problems among different racial/ethnic groups. However, it should be noted that there were a small number of studies included in this meta-analyses, and these studies were not specifically designed to detect racial/ethnic differences in treatment response, which leads to a number of limitations of this review (for a review, see Huey & Polo, 2008). Consequently, while these findings are promising, they should be interpreted cautiously. Further research is necessary to examine the efficacy of evidence-based, depression-focused interventions across and within racial/ethnic groups. Among these efforts, examination of cultural factors that can influence treatment utilization, engagement, and completion, including views of mental health treatment, adherence to cultural values, and acculturation/enculturation status should be included. This paper describes 1) our concept for a culturally-relevant, Web-based, self-help depression intervention for U.S. Latina/o adolescents (12-17 years of age): *Rise Above (Siempre Sale el Sol)*; and 2) qualitative data gathered from thematic interviews with 32 experts nationally to gain insight into the potential efficacy of this intervention and the feasibility of implementation. The site is currently under development with funding support from the National Institute of Mental Health (R01 MH081056-03S2).

We chose to pursue development of this intervention for Latino families for a variety of reasons. First, Latina/os experience high rates of depression (Twenge & Nolen-Hoeksema, 2002). Second, authors have consistently noted that Latina/os tend to underutilize (López, 2002) and prematurely terminate (e.g., Organista, Muñoz, & Gonzalez, 1994) formal mental health services. Third, a variety of barriers (e.g., culture, language) may limit access to other treatment options in this population (Alegría, Atkins, Farmer, Slanton, & Stelk, 2010). Fourth, our research team has a long history of providing culturally sensitive, evidence-based services to Latino families (e.g., Cardemil, Kim, Pinedo, & Miller, 2005; de Arellano et al., 2005; de Arellano & Danielson, 2008).

Several barriers to treatment seeking and utilization among Latina/os have been identified. Some authors have cited cultural factors, such as a wide use of, and reliance on, religious healing systems (e.g., Koss, 1980) and family support systems (Cauce et al., 2002) as possible reasons for low rates of utilization. As such, the integration of cultural constructs may heighten engagement of Latino families. Other authors have posited lack of proximity to service centers (Aguilar-Gaxiola et al., 2002), limited familiarity with U.S. culture (e.g., English language proficiency), socioeconomic status (Bailey, Skinner, Rodriguez, Gut, & Correa, 1999), transportation problems (Miranda et al., 1996), and a limited number of bilingual counselors (Sue & Sue, 1999) as possible reasons for underutilization. Among undocumented, immigrant populations, fear of arrest or deportation has been found to delay utilization of treatment services even when available (Pumariega, Rothe, & Pumariega, 2005). Novel methods of reaching this population are clearly warranted in light of these and other barriers to receipt of services. Potential interventions developed for Latino families should be culturally relevant and easily accessible as these have been noted barriers for service utilization.

Potential Utility of Web-Based Interventions for Latina/os

Web-based interventions may be a viable treatment option for Latino families who are faced with barriers to traditional treatment. Studies have suggested that Internet-based interventions can address barriers to treatment and effectively treat a wide range of mental health disorders (Amstadter, Broman-Fulks, Zinzow, Ruggiero, & Cercone, 2009; Carlbring et al., 2011), including depression (O'Kearny, Gibson, Christenson & Griffiths, 2006; O'Kearny, Kang, Christenson, & Griffiths, 2009). To date, there are two published web-based, depression-focused interventions for adolescents (Landback et al., 2009; O'Kearney et al., 2009). However, these studies were conducted with predominantly White families, thus limiting generalizability to Latino families. Moreover, these interventions do not include culturally-tailored content which has been consistently shown to increase treatment engagement, adherence, retention, and completion, particularly among racial/ethnic minorities (Smith, Domenech Rodriguez, & Bernal, 2011). Self-help, web-based interventions may be particularly helpful for Latina/os as they can be tailored to the needs of the user (Carlbring et al., 2011), such as offering the intervention in Spanish, and integrating Latina/o cultural values to increase relevance of the treatment components (e.g., presenting spirituality as coping skill; using *dichos*, popular sayings in the Latina/o culture, to present psychoeducational material) (Aviera, 1996; Cardemil et al., 2005; Rosselló & Bernal, 1999). Additionally, web-based interventions are convenient because they assist in overcoming various economic barriers to care such as transportation and scheduling barriers, as well as out of pocket costs for services. They also can be accessed from the convenience and privacy of one's home, which can further serve to address cultural stigma issues related to treatment seeking. For example, Latino males who adhere to *machismo* values may not be willing to seek formal mental health treatment as they may feel the need to project an image of strength and self-reliance (De La Cancela & Guzman, 1991; Torres, Solberg, & Carlstrom, 2002).

Rapid growth in Internet usage in the U. S. population and among Latina/os specifically appears to support the feasibility of reaching Latino families with this approach. Recent

estimates, based on a survey by the Pew Internet & American Life Project ($n = 13,687$) and the Pew Latino Center ($n = 7,554$), indicated that Latina/o adults' use of the Internet increased from 54% to 64% between the years 2006 and 2008 (Fox, 2009). This increase was observed amongst U.S. born (75% to 77%) and foreign-born Latina/o adults (40% to 52%). An increase in Internet use was also found in Latino households with an annual income of less than \$30,000 (17%) and in households earning \$30,000 to \$49,000 annually (2%). Additionally, recent self-help, web-based interventions have demonstrated comparable participation rates among Latina/o and non-Latina/o participants (Muñoz et al., 2009; Muñoz et al., 2006). Further, households with adolescents tend to be among those most likely to have high-speed Internet (Macgill, 2007). Overall, the availability of freely accessible self-help interventions that are adapted to this population may go a long way toward overcoming many service utilization barriers. The remainder of the paper describes our approach to developing a culturally relevant, self-help, web-based intervention for Latina/o adolescents.

Overview of Rise Above (Siempre Sale el Sol)

As mentioned above, depression is a prevalent disorder among adolescents with some studies suggesting higher rates among Latina/o youth (Costello et al., 2008). Therefore, after careful consideration of the specific needs of Latina/o youth, and particularly the transportability of user-friendly intervention approaches via the Internet, we chose to develop a depressed mood-focused intervention featuring behavioral activation as a guiding framework (Hopko et al., 2003; Lejuez, Hopko, LePage, Hopko, & McNeil, 2001; Ruggiero, Morris, Hopko, & Lejuez, 2007). Behavioral activation is an efficacious treatment for depression which focuses on the association between an individual and their environment as well as triggers and maladaptive coping strategies which result in the cause and maintenance of depression (Hopko, et al., 2003; Martell, Addis, & Jacobson, 2001). Behavioral activation has been shown to be a straightforward and cost-effective approach—and, therefore, very well suited for Internet delivery (Ruggiero et al., 2007). The goal is to increase healthy activities to reinforce positive consequences and improve mood (Lejuez, Hopko, & Hopko, 2002). As part of these strategies, adolescents are presented with pleasant activities lists (e.g., items from the Pleasant Events Checklist, Reinforcement Survey Schedule) that recommend specific activities that may be appealing to them with the goal of increasing follow-through with selected items. Participants are provided with audio and visual demonstrations of these principles as well as downloadable or printable activity forms.

A key goal of the design phase was to maximize appeal and engagement including visual appeal, user-friendliness, and user reaction to the site. Several steps were taken. First, we designed the psychoeducation and behavioral activation components to encourage participant engagement. This required the utilization of clear and concrete information, provision of several case examples (e.g., testimonials), and the inclusion of visuals, such as illustrations, pictures, and video clips. Second, keeping in mind varying reading levels among the adolescent population, text was kept simple and straightforward, and shorter sentences were utilized rather than lengthy paragraphs. Further, the choice of receiving the information via audio or video recordings was also included. Finally, quizzes, roll-over content (i.e., content that appears when mouse is rolled over icon), and progress meters (i.e.,

bar monitoring progress through site) were incorporated throughout the intervention to increase engagement and motivation among adolescents (Loranger & Nielsen, 2005).

Integration of Culture and Evidence-Based Treatment

Over the last several years, there has been an increased awareness of the importance of cultural issues as it relates to efficacious mental health treatments for racial/ethnic minorities. Many experts (e.g., Bernal, Bonilla, & Bellido, 1995; Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009; Smith et al., 2011) have emphasized the importance of EBTs accounting for a patient's cultural contexts and values, including the integration of cultural values, collaboration with individuals familiar with patients' culture, provision of extra services to increase patient retention (e.g., child care), and cultural sensitivity training for professional staff (Griner & Smith, 2006). As such, many experts have advocated for the adaptation of EBTs, defined as the systemic modification of interventions to consider the patient's culture (Bernal et al., 2009), in order to better address the specific needs of minority racial/ethnic groups. To date, various authors have adapted EBTs for use with Latina/os (e.g., Cardemil et al., 2005; Kanter, Santiago-Rivera, Rusch, Busch, & West, 2010; McCabe & Yeh, 2009; Rosselló et al., 2008). Evaluation of these treatments provides evidence for the effectiveness of culturally modified EBTs in reducing psychopathology, including depression, in Latina/o children and adolescents (e.g., Matos, Torres, Santiago, Jurado, & Rodriguez, 2006; Rosselló & Bernal, 1999; Rosselló et al., 2008). Furthermore, recent research has provided preliminary evidence in support of behavioral activation, specifically, as an efficacious treatment approach for depression among Latina/os (Kanter et al., 2010; Santiago-Rivera et al., 2008).

One adaptation model that has received considerable attention in the literature is the Ecological Validity and Cultural Sensitivity Framework (Bernal et al., 1995; Bernal & Sáez-Santiago, 2006). This model was originally conceptualized for Latina/o populations and focuses on adapting the content of an evidence-based treatment for the purpose of making the treatment protocol compatible with an individual's cultural patterns and values (Bernal et al., 2009). The model consists of eight culturally-sensitive dimensions: language (i.e., appropriate and culturally sysonic), person (i.e., ethnic/racial similarities and differences between client and therapist in shaping therapy relationship), metaphors (i.e., symbols and concepts), content (i.e., cultural knowledge including values, customs and traditions), concepts (i.e., treatment concepts consonant with culture and context), goals (i.e., support of positive and adaptive values from the culture of origin), methods (i.e., consideration of culturally sensitive treatment methods), and context (i.e., consideration of social and economic context). The application of this framework in the adaptation of EBTs has been shown to be successful in maintaining treatment fidelity to treatment protocol, in participant retention and engagement, and in the reduction of externalizing and depressive symptoms in Latina/o youth (Duarté-Vélez, Bernal, & Bonilla, 2010; Matos et al., 2006; Rosselló & Bernal, 1999; Rosselló et al., 2008).

Application of Adaptation Model

We applied Bernal and colleagues' (1995) framework for ecological validity and culturally sensitive criteria in the development of this intervention with the goal of delivering a novel, culturally sensitive, and potentially efficacious self-help depression intervention for Latina/o adolescents (see Table 1). Applications of individual dimensions are presented below:

Language

Keeping in mind varying acculturation and enculturation processes within Latina/o populations, participants were offered the choice of language (i.e., English or Spanish) when delivering the intervention. Appropriate use of informal and formal language was utilized depending on adolescent or parent component. Specifically, when addressing the user, the informal *tú* was utilized for adolescents. This presented difficulties from a content development perspective, but was felt to be important for purposes of maximizing engagement of Spanish-speaking users.

Person

The consideration of ethnic/racial similarities and differences between patient and therapist in shaping the therapy relationship was a challenge when applied to a web-based, self-help intervention. However, we attempted to build trust and connection through *personalismo* (i.e., building a sense of closeness in relationships) (Cuéllar, Arnold, & Gonzales, 1995) by providing users with access to a web page containing pictures and biographies of the intervention staff, including self-disclosure regarding cultural background, previous experience working with Latina/os, and goals and hopes for the intervention (Cardemil et al., 2005). Other strategies included having illustrations and actors in video clips of same race/ethnicity, and demonstrating awareness of the sociocultural influences on our participants' lives, such as socioeconomic status, acculturation/enculturation processes, and religious affiliations.

Metaphors

We utilized *dichos* such as “*después de la lluvia sale el sol* (after the rain comes the sun)” to present and reinforce educational material (Rosselló & Bernal, 1996), and “*el que nada no se ahoga* (if you know how to swim you won't drown)” to reinforce practicing skills for improved mood. It has been posited that the use of *dichos* and other cultural images (e.g., pictures of Latina/o adolescents) may communicate treatment components more effectively and may make the user feel more comfortable and understood (Aviera, 1996; Bernal and Sáez-Santiago, 2006).

Content

Given the vast heterogeneity found within the Latina/o population, the intervention was tailored based on adherence to specific cultural values, which were integrated throughout the psychoeducation (e.g., coping skills) and behavioral activation (e.g., activities list) components. For example, if an adolescent were to endorse adherence to spirituality and religiosity, possible coping skills and activities would include prayer, attending weekly religious services, or volunteering at church. Other examples integrate *familismo* (i.e.,

attachment and loyalty to immediate and extended family) (Sabogal, Marín, Otero-Sabogal, Marín & Pérez-Stable, 1987) into coping skills and behavioral activation strategies by encouraging seeking support from family members and relatives, or increasing activity level (e.g., talking on the phone, going for a walk, cooking together). The inclusion of culturally-relevant activities has been shown to be successful in use of behavioral activation treatment with Latinos (Kanter, Diéguez Hurtado, Rusch, Busch, & Santiago-Rivera, 2008). In addressing adherence to *machismo* (i.e., dominant, head of household) (Cuéllar et al., 1995) or *marianismo* (i.e., devotion to motherhood, self-sacrificing, self-silencing) (Vazquez, 1998), we included possible manifestations of these gender roles in the expression of depression. For example, we normalized sad feelings for male adolescents and emphasized strength in the acknowledgment of these feelings; and discussed expressing feelings of sadness rather than “suffering in silence” among female adolescents.

Concepts

To maintain consonance with culture and context within the intervention model, cultural rationales for onset of depression (e.g., biological, spiritual, fatalistic), use of traditional and/or mainstream treatments (e.g., physician, religious leaders, folk-healers or *curanderos*), and potential barriers to treatment (e.g., language, transportation, past experiences with mental health providers) were included.

Goals

Goals were addressed through a cultural lens focusing on values. For example, we highlighted the possible influence of depression on relationships, thus addressing values of *familismo* and *personalismo*, both of which have been argued to be central values found within the Latino culture (Cuéllar et al., 1995), and presented related goals involving identifying and managing negative mood in order to improve quality of interpersonal relationships.

Methods

In developing a culturally-sensitive intervention, we incorporated endorsed cultural values throughout the psychoeducation and behavioral activation components to increase relevance of material. For example, if applicable, we recommended reaching out to, and spending time with, family members, neighbors, peers, and religious leaders as potentially pleasant activities, as well as a way to improve coping skills. In addition, potentially pertinent constructs that may be relevant to the Latina/o population, such as barriers to treatment (e.g., acculturation, immigration issues) and life stressors (e.g., low SES, poverty, discrimination), were addressed in both the psychoeducation and behavioral activation components.

Context

The changing social and economic contexts observed in Latina/o populations, as well as potential life stressors, were integrated throughout the intervention. For example, for enculturated individuals who may not be familiar with mental health disorders and treatments (Gonzales, 1997), we included a pre-therapy orientation explaining the intervention process, the goals, and the need to practice learned skills. Additionally, the

prevalence of depressive symptoms among adolescents, with specific emphasis on cultural (e.g., acculturation process), economic (e.g., low SES), and social stressors (e.g., discrimination), was thoroughly addressed by presenting case vignettes and video testimonials throughout the content.

Structure of Rise Above (Siempre Sale el Sol)

The general structure of the site is as follows. First, similar to other web-based, depression-focused interventions for adolescents (O'Kearny et al., 2009), when first accessing the site, users are presented with a disclaimer that explains terms of use, privacy notice, and the PI's contact information. If users choose to agree to the terms of the disclaimer, they will be taken to a registration page to create a personal username and password. Users are then presented with an introduction to the organization and navigation of the site. Next, users are presented with a brief video explaining the purpose and goals of the intervention, describing the various symptoms of depression, and discussing how the intervention is designed to address these symptoms. This pre-intervention orientation may be particularly useful as it may increase knowledge of the intervention process, change faulty expectations, and may decrease drop-out (Walitzer, Dermen, & Connors, 1999). Participants then complete a ten question, Likert scale screener designed to measure adherence to specific cultural values and exposure to socioeconomic and life stressors in order to tailor the content to the specific needs of the user. This addition was a necessary component as authors have found that tailoring web-based interventions according to patient characteristics may improve motivation and treatment adherence (Carlbring et al., 2011; Meyer et al., 2009). Users' answers to those questions are used to guide delivery of subsequent intervention content to ensure that the intervention, as delivered, is sensitive to cultural differences between users. For example, endorsement of spirituality will be highlighted in coping strategies (e.g., engaging in prayer) and activities for behavioral activation (e.g., attending spiritual or religious services). The delivery of the psychoeducation components is highly interactive and consists of roll-over content, quizzes, and videos. Similarly, as part of behavioral activation, users are encouraged to select activities they find enjoyable from several checklists provided, and are then prompted to construct a weekly schedule with their selected activities listed daily and at specific times of the day. Upon completion of the intervention content and post-intervention knowledge-check (approximately 45 minutes), participants complete a brief satisfaction survey before exiting program. Participants are asked to use the intervention on at least 8 occasions, for at least 20 minutes per visit, over an 8-12 week period. Participants are encouraged to review psychoeducation material if needed, to construct weekly activity schedules, and to monitor progress with completion of activities and overall mood. Given that this is a depression-focused intervention, a link to the National Suicide Hotline will be present at the top of every web page.

Provider Interviews

The extant literature on the cultural modification of EBTs recommends the gathering of information regarding potential cultural adaptations from a number of different sources, including mental health providers with experience working with the desired population (Hwang, 2009; McCabe, Yeh, Carland, Lau, & Chavez, 2005; Nicolas, Arntz, Hirsch, &

Schmiedigen, 2009), as the first step in the implementation of the adapted intervention. These studies have utilized focus-groups and/or semi-structured interviews to collect qualitative data from providers regarding the relevance of cultural considerations, feasibility of implementation, and possible efficacy of the adapted intervention in addressing the mental health needs of a specific cultural group. Therefore, to better inform our application of Bernal's cultural adaptation model and to provide feedback regarding feasibility and potential efficacy of this intervention with Latina/o youth, we conducted semi-structured interviews with a national sample of mental health providers servicing Latina/o populations and/or clinical researchers with a focus on Latina/o mental health, Latina/o adolescent depression, service-utilization, and cultural-adaptation of EBTs.

Study Design

Qualitative methods (i.e., individual provider thematic interviews) using a constructivist grounded theory approach (Charmaz, 2006) were used to collect data intended to inform the development of a web-based depression intervention for Latina/o youth. A national sample of 32 mental health providers and/or clinical researchers servicing Latina/o populations were interviewed to a) discuss feasibility of implementation, b) examine potential barriers to treatment and strategies to ensure engagement, c) gather feedback about the application of the cultural adaptation model, and d) discuss the possible efficacy of this depression-focused intervention in addressing the mental health needs of Latina/o adolescents. We utilized a flexible interview guide that addressed specific topics and subject areas of inquiry, but also allowed moderators the freedom to explore, probe, and ask relevant follow-up questions to clarify provider's responses (see Appendix 1 for copy of the thematic interview guide). The first author conducted interviews over the phone lasting between 30 and 45 minutes. All interviews were audio-recorded for record-keeping, transcription, and coding purposes. Provider interviews began with a brief overview of the framework (i.e., web-based, self-help format) and goals of our planned intervention. The interviewer then asked approximately 5-7 key, open-ended questions with corresponding follow-up questions. All study procedures were approved by the Institutional Review Board of the Medical University of South Carolina.

Recruitment

As mentioned above, all participants were mental health providers servicing Latina/o populations and/or clinical researchers with a focus on Latina/o mental health, Latina/o adolescent depression, and cultural-adaptation of EBTs. Inclusion criteria included having at least three years of clinical and/or research experience with Latina/os. In our efforts to obtain a representative sample of providers with a wide range of perspectives, potential participants were selected from professional organization listserv including the American Psychological Association, the Association for Cognitive and Behavioral Therapies, the National Latina/o Psychological Association, the Latina/o Behavioral Health Institute, and the National Hispanic Science Network. Invitations to participate in this study were sent via email, and interested parties were instructed to contact the principal investigator to schedule a phone interview. Our recruitment strategy was purposive in that we specifically sought individuals who had direct knowledge of the mental health care needs of Latina/o

adolescents and families, help-seeking and service-utilization in this population, and cultural-adaptation of EBTs for Latina/os.

Participants

Of the 42 eligible providers, 32 participated in this study. Ten of the providers did not respond to the invitation. The final sample included 8 males (25%) and 24 females (75%) with an age range of 27 to 58 years ($M = 40.59$; $SD = 7.64$). Twenty-four providers (75%) self-identified as Latina/o, 6 (18.8%) as Caucasian, 1 (3.1%) as African American, and 1 (3.1%) as Asian American. Eleven providers (34.4%) self-identified as primarily conducting clinical research, eight (25%) as solely providing clinical care, and 13 as roughly equally dividing their time between clinical work and research (40.6%). Almost half of the participants reported being currently employed at a university (46.9%), 13 at a counseling center (40.6%), and four at a medical center (12.5%). Twenty-four participants (75%) had a PhD in clinical psychology, four a masters in social work (12.5%), two were licensed social workers (6.3%), and two had a master's degree in psychology (6.3%). The majority of participants (85.2%) had at least six years of research and/or clinical experience with Latina/os, and 90.6% were bilingual.

Data Analysis Approach

We used a constructivist grounded theory approach (Charmaz, 2006) for coding data and to capture both emerging and pre-identified themes from interview data. This approach was well suited for this data, as it takes the context of the question into account, acknowledges coders' prior knowledge and influence on the coding processes, and provides guidelines for building conceptual frameworks between coded constructs. In order to identify salient thematic categories, a content analysis of the qualitative responses was conducted through multiple close readings of the transcriptions by two independent doctoral-level coders. Each coder generated an independent list of thematic categories and subcategories based on their review of the data. The coders then met in consensus to discuss the categories, resolve questions, and further refine the thematic categories. Once this was accomplished, the themes were again reviewed by the coders and the final thematic categories were completed and higher order categories were developed. The authors have previously used similar analytic approaches to qualitative research with provider populations (Hanson et al., 2013). Kappas above 0.60 are rated as reliable (Pelligrini, 2004). Coding strategies indicated high levels of inter-rater agreement with an average kappa of 0.90.

Results

We gained valuable insight into the perceptions of providers regarding the barriers to care faced by Latina/o adolescents experiencing depression, as well as to the cultural relevance, feasibility, and strengths and weaknesses associated with delivering our intervention to this population (see Table 2). Generally speaking, interviewees clearly and enthusiastically acknowledged the need for innovative strategies to increase access to care and address the mental health care needs of Latina/o adolescents. They viewed the proposed intervention as a potentially valuable approach to addressing the needs of depressed Latina/o adolescents in that it could increase knowledge of depression and improve their overall mood (18

interviewees; 56.3%). They also expressed that it had a potential to increase treatment engagement and completion via integration of culturally appropriate features (e.g., offering intervention in Spanish, utilizing cultural values as coping mechanisms) (24 interviewees; 75%). Providers also noted that *e*-health interventions are easily accessible (13 interviewees; 40.6%) and cost-effective (5 interviewees; 15.6%), thus having the potential to reach many families in need.

With regard to content, addressing stigma through psychoeducation (15 interviewees; 46.8%), and the integration of cultural rationales for onset of depression (e.g., biological, spiritual), experience of depression (e.g., somatization), use of traditional and/or mainstream treatments (e.g., physician, folk-healers), and the potential barriers to treatment into the content (18 interviewees; 56.3%) were strongly encouraged. Interviewees felt that this would be particularly beneficial for enculturated individuals who may not be familiar with mental health disorders and treatments. Similarly, interviewees reported that Latina/o adolescents and families may experience unique life stressors which can influence mental health and service utilization, including immigration and residency status (9 interviewees; 28.1%), social economic status (13 interviewees; 40.6%), and discrimination (5 interviewees; 15.6%).

In order to increase patient engagement and motivation, interviewees consistently emphasized the need for highly interactive content and activities including the use of visuals, videos, and music (23 interviewees; 71.8%) as well as presenting content at a basic reading level (8 interviewees; 25%). Additionally, interviewees noted that the use of testimonials (in video format) depicting Latina/o teens and their experiences with depression could increase content relevance (9 interviewees; 28.1%). Interviewees consistently supported the inclusion of parents as part of the adolescent intervention. Interviewees reported that parent participation could be helpful in assisting with child engagement (22 interviewees; 68.8%) and treatment completion (16 interviewees; 50%). They also stressed the need for discussion of acculturation and the acculturation gap between parents and adolescents (30 interviewees; 93.8%) as it can be stressful for Latina/o families (e.g., affecting parent-child communication) and can influence youth mental health outcomes.

Whereas interviewees were generally enthusiastic about the feasibility and potential efficacy of this intervention, they did endorse a few noteworthy concerns that would need to be addressed prior to dissemination. A primary concern was related to reading and computer literacy as significant barriers in accessing and successfully completing the intervention exist among newly immigrated and enculturated families (10 interviewees; 31.2%). Moreover, some interviewees felt that a web-based approach may not readily reach families without internet access (8 interviewees; 25%), thus potentially excluding underserved families who may be at particular risk for mental health problems. Another concern included the potential lack of privacy if adolescents were completing the intervention at their home computer where other family members may be present (6 interviewees; 18.8%). Similarly, concerns were also voiced about keeping the adolescent and parent components of the intervention separate. Finally, some interviewees expressed concern regarding the management of suicidality online (5 interviewees; 15.6%) and how this could be done effectively and safely.

Limitations

This study had several limitations. The thematic interviews were conducted with a small, but diverse sample of national experts that included both clinicians and clinical researchers. However, given that we achieve theme saturation suggests that we captured the breadth of experience available from this sample. Additionally, given the vast heterogeneity found within the Latino population, it is possible that provider reactions to the utility and relevance of the intervention might not be generalizable to all groups.

Conclusions

To date there have been few easily accessible, evidence-based, depression-focused, self-help interventions for Latina/o youth. This is particularly troublesome given that Latina/os comprise approximately 16% of the U.S. population (U.S. Census, 2010), and that Latina/o youth are at high risk for depression and tend to underutilize formal mental health services. This prominent disparity between mental health risk and service utilization calls for novel intervention strategies to address the unique needs of this population.

In this paper we described our concept for the development of a depressed mood-focused, web-based, self-help intervention for Latina/o adolescents and provided qualitative data from 32 national expert interviews used to inform our application of the cultural adaptation model, as well as the potential feasibility of our intervention. We utilized a web-based approach, which has been found to be an efficacious delivery strategy in the treatment of a variety of disorders (Amstadter et al., 2009), and may have significant potential in minimizing service barriers among Latina/os as it is easily accessible and can be tailored to the needs of the user (e.g., offered in Spanish; integration of cultural values). In developing a web-based intervention for Latina/o adolescents, we were presented with several challenges. Specifically, to maximize appeal and engagement, we paid considerable attention to developmental and cultural factors. Developmental considerations included the use of testimonials, visuals, and interactive components (e.g., roll-over content, quizzes) throughout the intervention as well as simple and straightforward text in consideration of varying reading levels.

With regard to cultural considerations, we applied a cultural adaptation model, the Ecological Validity and Cultural Sensitivity Framework (Bernal et al., 1995), which has been shown to be efficacious in the adaptation of EBTs for depressed Latina/o adolescents (Rosselló & Bernal, 1999; Rosselló et al., 2008). We conducted interviews with national experts to better inform our application of this model with the goal of increasing the relevance and utility of this intervention for Latina/o adolescents. We encountered a few complexities in the application of this framework to a web-based model. First, given the vast heterogeneity of the Latina/o population in the U.S., we are expecting considerable variability with regard to language preference, immigration histories, acculturation and enculturation processes, adherence to Latina/o values and traditions, and socioeconomic and life stressors, which would not allow for a “one-size-fits-all” intervention. Instead, we attempted to address these concerns by offering the intervention in English and Spanish, and by tailoring the content to the specific needs of the user in order to increase relevance and engagement. Another area of consideration was in how to promote a sense of connectedness

when using a self-help approach that would be similar to that of a traditional face-to-face treatment method. Thus, we attempted to personalize the content by providing self-disclosing information regarding staff cultural backgrounds, as well as integrating visuals and text examples highlighting various sociocultural influences.

Future Directions

We are encouraged by the interviewers' enthusiasm about the availability of a freely accessible, interactive intervention for depressed Latina/o adolescents. Providers recognized the potential of this intervention in addressing commonly observed treatment barriers among the Latina/o population, such as transportation (and other cost and time-related commitments), stigma, and scheduling. Additionally, interviewers felt that this is a potentially effective intervention for depressed Latina/o adolescents that can likely reach many families in need. Plans for continued evaluation include refining the intervention in response to the provider responses, followed by rigorous evaluation of the intervention via randomized controlled trial methodology. This includes the need for an examination of Latina/o adolescents assigned to the site *vs.* adolescents assigned to a comparison site that does not target depressed mood, as well as comparisons to other evidence-based online interventions that are not culturally specific. Data from these studies will guide further refinements to the intervention. It is our hope that the integration of an EBT (*i.e.*, behavioral activation) and cultural consideration (Ecological Validity Framework) will result in a culturally sensitive and potentially effective self-help, depression intervention for Latina/o youth. Once efficacy is established, future dissemination efforts include partnering with local community agencies (*e.g.*, community mental health clinics) and national organizations (*e.g.*, National Latino Behavioral Health Association) servicing Latina/o populations to disseminate this freely accessible intervention to Latino families in need. Moreover, we plan to utilize new media/social strategies (*e.g.*, Facebook, Twitter) as part of our dissemination strategy. It is important to note, however, that web-based approaches have the disadvantage in that they do not readily reach families without Internet access. We hope to address this by developing hardcopy and DVD-based versions of the intervention after it is tested and refined. We hope that our continued work will serve to inform the scientific community of the importance of cultural consideration as well as the need for the integration of culture and evidence-based interventions to better service the mental health needs of underserved populations.

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Appendix 1 Semi-structured interview

Thank you for participating in this NIMH funded study. This interview should take about 30 to 45 minutes. First, we will ask you questions about who you are and your experience working with Latina/o families. Next, we will tell you about our plans for developing a self-help, web-based intervention for Latina/o adolescents who may be experiencing depressive

symptoms. We will then ask you a series of questions to get some ideas from you about how we can make our Website most helpful to this population. This interview will be audio-taped so that we don't miss anything. Do you have any questions?

Section A. About You and Your Work

- A1. Ok, let's start. First, what type of treatment center are you employed with? (e.g., counseling center, hospital, crisis center)?
- A2. What is your primary role at your place of employment? (*Clinician, clinical researcher, both*)
- A3. How long have you been employed by your current placement?
- A4. How long have you been providing mental health services (*or conducting clinical research with Latina/os*) to Latina/os? (months or years) what about Latina/o adolescents? (months or years)
- A5. Have you treated Latina/o adolescents that have experienced stressful events (e.g., divorce of parents, exposure to violence, immigration/acclimation difficulties, racism/discrimination) over the last 5 years? If so, how many? a)1-5, b)6-10, c)11-20, d) 20+
- A6. Have you treated Latina/o adolescents that have experienced depressive symptoms over the last five years? If so, how many? a)1-5, b)6-10, c)11-20, d) 20+
- A7. Next, a few more questions about your background for statistical purposes. What degrees do you hold (MD, PhD, MSW, EdD, LMSW, LISW, PsyD)
- A8. Are you bilingual? If so what language(s) do you speak other than English?
- A9. Do you typically conduct therapy with Latina/o adolescents in English or Spanish? What about with parents or family members?
- A10. [Interviewer circle gender Male Female]
- A11. Would you mind telling me your age? [If **REFUSE**, move on]
- A12. Would you mind telling me what race/ethnicity you identify with? [If **REFUSE**, move on]

Section B. Your Experience Working with Latina/o Families

- B1. Next, I just have a few questions about your experiences working with Latina/o individuals and families. When you provide treatment to Latina/o youth with symptoms of depression, what interventions or strategies have you found to be most effective?
- B2. Given the vast heterogeneity that is typically found within the Latina/o population, how do you address cultural issues when working with various Latina/o groups?

B3. If you were to adapt an intervention for Latina/o adolescents and families who may be experiencing symptoms of depression, how much would you address the incorporation of culture into treatment, if at all?

B4. What approaches have you found to be most effective for engaging your clients in treatment during the first session?

B5. What approaches have you found to be most effective for continued engagement throughout treatment?

Section C. Orienting Participants to Project Goals and Website Content

Next, I am going to give you a brief overview of our project. The main goal is to develop a culturally-sensitive, self-help, web-intervention for Latina/o adolescents who may be experiencing symptoms of depression. This website will educate adolescents on depressive symptoms and will teach them various skills for managing these symptoms. The evidence-informed material will be presented in the form of an interactive, web-based module.

Section D. Semi-Structured Interview

D1. What are your impressions about the appeal and feasibility of a Web-based intervention to be useful for Latina/o adolescents?

[Follow-up prompt]:

- How receptive do you think Latina/o adolescents would be to a web-based intervention?
- How can we maximize utilization of this Web-based intervention?
- How could we best motivate Latina/o adolescents to try the strategies we recommend, such as increasing their activity levels?

D2. What types of concerns or challenges do you have about this Web-based intervention with Latina/o adolescents? (e.g., potential barriers, privacy issues)

[Follow-up prompt]:

- How could we best address these challenges?

D3. How could we make this Website most appealing and engaging for Latina/o adolescents?

[Follow-up prompt]:

- Are there unique features we should include?
- Are there any cultural considerations we should apply in order to increase cultural relevance for Latina/o adolescents?

Now that we have discussed this some, I would like to ask you a few more questions regarding your impressions of some of the cultural consideration we have included in order to increase the relevance and usefulness of this intervention.

D4. First, we are offering the intervention in both English and Spanish.

[Follow-up prompt]:

- Do you have any language concerns for the Spanish version (i.e., dialect)?
- If so, how can we address these to make it more effective for working with Latina/o adolescents and their families?

D5. The second cultural consideration includes taking into account potential social and economic contexts (e.g., acculturation process, socio-economic conditions). For example, we incorporated a pre-intervention orientation to explain the intervention process, goal-setting, and the importance of practicing learned skills.

[Follow-up prompt]:

- How helpful do you think this would be?
- Do you have any concerns? If so, how can we address it to make it more effective?
- What else could we incorporate to make this most helpful?
- Any thoughts about how to best implement these?

D6. Also, as part of depression psychoeducation, we focused on various stressors typically found among Latina/o population (e.g., poverty, discrimination, social isolation as result of uprooting/immigration) as possible risk factors for depression.

[Follow-up prompt]:

- How receptive would Latina/o adolescents and their families be to these considerations?
- Do you have any concerns regarding these considerations? If so, how can we address these to make it more effective for working with Latina/o adolescents?
- Are there some additional considerations that should be taken into account?
- Any thoughts about how to best implement these?

D7. Finally, we are incorporating culturally relevant material throughout the various module components, including integrating Latina/o cultural values to present our treatment components – such as Familismo, Machismo/Marianismo, Spirituality, and Personalismo.

[Follow-up prompt]:

- How important has it been for you to integrate these values into treatment?
- How have you incorporated these values into treatment?
- How receptive were your adolescents and their families to these integrations?

- How might attending to these values make the intervention more appealing or relevant to Latina/o adolescents and their families?
- Do you have any concerns about the integration of these values? If so, how can we address these to make it more effective for working with Latina/o adolescents?
- Are there some additional considerations that should be taken into account?

Section E. Completion of Interview

That completes the questions I had for you. We truly appreciate your time and thoughts. If you have any questions or comments, please feel free to give us a call. Do you have any questions before we wrap up? Thanks again!

References

- Alegría M, Atkins M, Farmer E, Slaton E, Stelk W. One size does not fit all: Taking diversity, culture and context seriously. *Administration and Policy in Mental Health and Mental Health Services Research*. 2010; 37:48–60. [PubMed: 20165910]
- Aguilar-Gaxiola SA, Zelezny L, Garcia B, Edmondson C, Alejo-Garcia C, Vega WA. Mental health care for Latinos: Translating research into action: Reducing disparities in mental health care for Mexican Americans. *Psychiatric Services*. 2002; 53:1563–1568. [PubMed: 12461216]
- Amstadter AB, Broman-Fulks J, Zinzow H, Ruggiero KJ, Cercone J. Internet-based interventions for traumatic stress-related mental health problems: A review and suggestion for future research. *Clinical Psychology Review*. 2009; 29:410–420. [PubMed: 19403215]
- Aviera A. ‘Dichos’ therapy group: A therapeutic use of Spanish language proverbs with hospitalized Spanish-speaking psychiatric patients. *Cultural Diversity and Mental Health*. 1996; 2(2):73–87. [PubMed: 9225563]
- Bailey DB Jr, Skinner D, Rodriguez P, Correa V. Awareness, use, and satisfaction with services for Latino parents of young children with disabilities. *Exceptional Children*. 1999; 65:367–381.
- Bernal G, Bonilla J, Bellido C. Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of interventions. *Clinical Psychology: Science and Practice*. 1995; 13:311–316.
- Bernal G, Jiménez-Chafey M, Domenech Rodríguez M. Cultural adaptation of evidence-based treatments for ethno-cultural youth. *Professional Psychology: research and practice*. 2009; 40:361–368.
- Bernal G, Sáez-Santiago E. Culturally centered psychosocial interventions. *Journal of Community Psychology*. 2006; 34:121–132.
- Bernal G, Scharro-del-Río MR. Are empirically supported treatments valid for ethnic minorities? Toward an alternative approach for treatment research. *Cultural Diversity and Ethnic Minority Psychology*. 2001; 7(4):328–342. [PubMed: 11759270]
- Cardemil EV, Kim S, Pinedo TM, Miller IW. Developing a Culturally Appropriate Depression Prevention Program: The Family Coping Skills Program. *Cultural Diversity and Ethnic Minority Psychology*. 2005; 11:99–112. [PubMed: 15884982]
- Carlbring P, Maurin L, Törngren C, Linna E, Eriksson T, Sparthar E, Anderson G. Individually-tailored, internet-based treatment for anxiety disorders: A randomized controlled trial. *Behaviour Research and Therapy*. 2011; 49:18–24. [PubMed: 21047620]
- Cauce AM, Domenech-Rodríguez M, Paradise M, Cochran BN, Shea JM, Srebnik D, Baydar N. Cultural and contextual influences in mental health help seeking: A focus on ethnic minority youth. *Journal of Consulting and Clinical Psychology*. 2002; 70:44–55. [PubMed: 11860055]
- Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System: Selected 2011 National Health Risk Behaviors and Health Outcome by Race/Ethnicity. 2011. Accessed 12/13 at http://www.cdc.gov/healthyyouth/yrbs/pdf/us_disparityrace_yrbs.pdf

- Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance—United States, 2005. *MMWR [Morbidity and Mortality Weekly Report] Surveillance Summary*. Jun 9.2006b 55:1–108.
- Charmaz, K. *Constructing grounded theory: A practical guide through qualitative analysis*. Sage Publications; New York: 2006.
- Costello DM, Swendsen J, Rose JS, Dierker LC. Risk and protective factors associated with trajectories of depressed mood from adolescence to early adulthood. *Journal of Consulting and Clinical Psychology*. 2008; 76(2):173. [PubMed: 18377115]
- Cuéllar I, Arnold B, González G. Cognitive referents of acculturation: Assessment of cultural constructs in Mexican Americans. *Journal of Community Psychology*. 1995; 23:339–356.
- de Arellano MA, Danielson C. Assessment of trauma history and trauma-related problems in ethnic minority child populations: An INFORMED approach. *Cognitive and Behavioral Practice*. 2008; 15:53–66.
- de Arellano MA, Waldrop AE, Deblinger E, Cohen JA, Danielson C, Mannarino AR. Community Outreach Program for Child Victims of Traumatic Events: A Community-Based Project for Underserved Populations. *Behavior Modification*. 2005; 29:130–155. [PubMed: 15557481]
- De La Cancela, V.; Guzman, L. Latino mental health service needs: Implications for training psychologists.. In: Myers, HF.; Wohlford, P.; Guzman, L.; Echemendia, RJ., editors. *Ethnic minority perspectives on clinical training and services in psychology*. American Psychological Association; Washington, DC US: 1991. p. 59-64.
- Duarte-Vélez Y, Bernal G, Bonilla K. Culturally adapted cognitive-behavioral Therapy: Integrating sexual, spiritual, and family identities in an evidence-based treatment of a depressed Latino adolescent. *Journal of Clinical Psychology: In Session*. 2010; 66:895–906.
- Essau CA, Conradt J, Petermann F. Frequency, comorbidity, and psychosocial impairment of depressive disorders in adolescents. *Journal of Adolescent Research*. 2000; 15:470–481.
- Fox, S. Pew research center's internet and American life project: Latinos online, 2006-2008. 2009. Retrieved from <http://www.pewinternet.org/Commentary/2009/December/Latinos-Online-20062008.aspx>
- Gonzales GM. The merge of Chicanos in the twenty-first century: Implications for counseling, research and policy. *Journal of Multicultural Counseling and Development*. 1997; 25:94–106.
- Griner D, Smith TB. Culturally adapted mental health interventions: A meta-analytic review. *Psychotherapy: Theory, Research, Practice, Training*. 2006; 43:531–548.
- Hanson RF, Stauffacher Gros K, Davidson TM, Barr S, Cohen J, Deblinger E, Ruggiero KJ. National trainers' perspectives on challenges to implementation of an empirically-supported treatment: Implications for technology-based solutions. 2013 Manuscript submitted for publication.
- Hopko DR, Lejuez CW, Ruggiero KJ, Eifert GH. Contemporary behavioral activation treatments for depression: Procedures, principles and progress. *Clinical Psychology Review*. 2003; 23:699–717. [PubMed: 12971906]
- Huey SJ, Polo AJ. Evidence-based psychosocial treatments for ethnic minority youth. *Journal of Clinical Child and Adolescent Psychology*. 2008; 37:262–301. [PubMed: 18444061]
- Hwang WC. The formative method for adapting psychotherapy (FMAP): A community-based developmental approach to culturally adapting therapy. *Professional Psychology: Research and Practice*. 2009; 40:369–377.
- Kanter JW, Hurtado G, Rusch LC, Busch AM, Santiago-Rivera A. Behavioral activation for Latinos with depression. *Clinical Case Studies*. 2008; 7(6):491–506.
- Kanter JW, Santiago-Rivera AL, Rusch LC, Bushch AM, West P. Initial outcomes of a culturally adapted behavioral activation for Latinas diagnosed with depression at a community clinic. *Behavior Modification*. 2010; 34:120–144. [PubMed: 20176914]
- Koss MP. A multivariate analysis of long-term stay in private practice psychotherapy. *Journal of Clinical Psychology*. 1980; 36:991–993. [PubMed: 6777401]
- Landback J, Prochaska M, Ellis J, Dmochowska K, Kuwabara SA, Gladstone T, Van Voorhees BW. From prototype to product: Development of a primary care/internet based depression prevention intervention for adolescents (CATCH-IT). *Community Mental Health Journal*. 2009; 45(5):349–354. [PubMed: 19641992]

- Lejuez, CW.; Hopko, DR.; Hopko, SD. The brief behavioral activation treatment for depression (BATD): A comprehensive patient guide. Pearson Custom Publishing; Boston: 2002.
- Lejuez CW, Hopko DR, LePage JP, Hopko SD, McNeil DW. A brief behavioral activation treatment for depression. *Cognitive and Behavioral Practice*. 2001; 8:164–175.
- Lewinsohn, PM.; Essau, CA. Depression in adolescents.. In: Gotlib, IH.; Hammen, CL., editors. *Handbook of depression*. Guilford Press; New York: 2002. p. 541-559.
- López SR. Mental health care for Latinos: A research agenda to improve the accessibility and quality of mental health care for Latinos. *Psychiatric Services*. 2002; 53(12):1569–1573. [PubMed: 12461217]
- Loranger, H.; Nielsen, J. Teenagers on the Web: Usability guidelines for creating compelling websites for teens. Nielsen Norman Group; 2005.
- Macgill, AR. Pew Internet & American Life Project: Memo on parent and teen Internet use. Oct. 2007 Accessed 10/07 at http://www.pewinternet.org/pdfs/PIP_Teen_Parents_data_memo_Oct2007.pdf
- Martell, CR.; Addis, ME.; Jacobson, NS. *Depression in context: Strategies for guided action*. W.W. Norton; New York: 2001.
- Matos M, Torres R, Santiago R, Jurado M, Rodriguez I. Adaptation of parent-child interaction therapy for Puerto Rican families: A preliminary study. *Family Process*. 2006; 45:205–222. [PubMed: 16768019]
- McCabe K, Yeh M. Parent-child interaction therapy for Mexican-Americans: A randomized clinical trial. *Journal of Clinical Child & Adolescent Psychology*. 2009; 38:753–759. [PubMed: 20183659]
- McCabe K, Yeh M, Garland A, Lau A, Chavez G. The GANA program: A tailoring approach to adapting parent child interaction therapy for Mexican Americans. *Education & Treatment of Children*. 2005; 28:111–129.
- McLaughlin KA, Hilt LM, Nolen-Hoeksema S. Racial/ethnic differences in internalizing and externalizing symptoms in adolescents. *Journal of Abnormal Child Psychology*. 2007; 35:801–816. [PubMed: 17508278]
- Meyer B, Berger T, Caspar F, Beevers CG, Andersson G, Weiss M. Effectiveness of a novel integrative online treatment for depression (deprexis): Randomized controlled trial. *Journal of Medical Internet Research*. 2009; 11:1–18.
- Miranda J, Azocar F, Organista KC, Muñoz RF, Lieberman A. Recruiting and retaining low-income Latinos in psychotherapy research. *Journal of Consulting and Clinical Psychology*. 1996; 64:868–874. [PubMed: 8916613]
- Muñoz RF, Lenert LL, Delucchi K, Stoddard J, Perez JE, Penilla C, Pérez-Stable EJ. Toward evidence-based Internet interventions: A Spanish/English Web site for international smoking cessation trials. *Nicotine & Tobacco Research*. 2006; 8:77–87. [PubMed: 16497602]
- Muñoz RF, Barrera AZ, Delucchi K, Penilla C, Torres LD, Pérez-Stable EJ. International Spanish/English Internet smoking cessation trial yields 20% abstinence rates at 1 year. *Nicotine & Tobacco Research*. 2009; 11:1025–1034. [PubMed: 19640833]
- Nicolas G, Arntz DL, Hirsch B, Schmiedigen A. Cultural adaptation of a group treatment for Haitian American adolescents. *Professional Psychology: Research and Practice*. 2009; 40:378–384.
- O'Kearney R, Gibson M, Christensen H, Griffiths KM. Effects of a cognitive-behavioural internet program on depression, vulnerability to depression and stigma in adolescent males: A school-based controlled trial. *Cognitive Behaviour Therapy*. 2006; 35:43–54. [PubMed: 16500776]
- O'Kearney R, Kang K, Christensen H, Griffiths K. A controlled trial of a school-based internet program for reducing depressive symptoms in adolescent girls. *Depression and Anxiety*. 2009; 26:65–72. [PubMed: 18828141]
- Organista KC, Muñoz RF, González G. Cognitive-behavioral therapy for depression in low-income and minority medical outpatients: Description of a program and exploratory analyses. *Cognitive Therapy and Research*. 1994; 18:241–259.
- Pellegrini, AD. *Observing Children in Their Natural Worlds: A Methodological Primer*. 2nd ed.. Lawrence Erlbaum Associates Publishers; Mahwah, NJ: 2004.
- Plant EA, Sachs-Ericsson N. Racial and ethnic differences in depression: The roles of social support and meeting basic needs. *Journal of Consulting and Clinical Psychology*. 2004; 72:41–52. [PubMed: 14756613]

- Potochnick SR, Perreira KM. Depression and anxiety among first-generation immigrant Latino youth. *Journal of Nervous and Mental Disease*. 2010; 198(7):470–477. [PubMed: 20611049]
- Pumariega AJ, Rothe E, Pumariega JB. Mental health of immigrants and refugees. *Community Mental Health Journal*. 2005; 41:581–597. [PubMed: 16142540]
- Rosselló, J.; Bernal, G. Adapting cognitive-behavioral and interpersonal treatments for depressed Puerto Rican adolescents.. In: Hibbs, ED.; Jensen, P., editors. *Psychosocial treatments for child and adolescent disorders*. American Psychological Association; Washington, DC: 1996. p. 157–185.
- Rosselló J, Bernal G. The efficacy of cognitive-behavioral and interpersonal treatments for depression in Puerto Rican adolescents. *Journal of Consulting and Clinical Psychology*. 1999; 67:734–745. [PubMed: 10535240]
- Rosselló J, Bernal G, Rivera-Medina C. Individual and group CBT and IPT for Puerto Rican adolescents with depressive symptoms. *Cultural Diversity and Ethnic Minority Psychology*. 2008; 14:234–245. [PubMed: 18624588]
- Ruggiero KJ, Morris TL, Hopko DR, Lejuez CW. Application of Behavioral Activation Treatment for Depression to an Adolescent With a History of Child Maltreatment. *Clinical Case Studies*. 2007; 6:64–78.
- Sabogal F, Marín G, Otero-Sabogal R, Marín B, Pérez-Stable EJ. Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences*. 1987; 9:397–412.
- Santiago-Rivera A, Knater J, Benson G, Derosé T, Illes R, Reyes W. Behavioral activation as an alternative treatment approach for Latinos with depression. *Psychotherapy Theory, Research, Practice, Training*. 2008; 45:173–185.
- Smith TB, Domenech Rodríguez M, Bernal G. Culture. *Journal of Clinical Psychology: In Session*. 2011; 67:166–175.
- Sue, DW.; Sue, D. *Counseling the culturally different*. 3rd ed.. Wiley; New York: 1999.
- Torres JB, Solberg VH, Carlstrom AH. The myth of sameness among Latino men and their machismo. *American Journal of Orthopsychiatry*. 2002; 72:163–181. [PubMed: 15792057]
- Twenge JM, Nolen-Hoeksema S. Age, gender, race, socioeconomic status, and birth cohort differences on the children's depression inventory: A meta-analysis. *Journal of Abnormal Psychology*. 2002; 111:578–588. [PubMed: 12428771]
- United States Census Bureau. The Hispanic Population. 2010. p. 2010 Accessed 02/13 from <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- Walitzer KS, Dermen KH, Connors GJ. Strategies for preparing clients for treatment. A review: *Behavior Modification*. 1999; 23:129–151.
- Vazquez MD. Silencing the self, relationship satisfaction and marianismo: An analysis of depression of Latinas: *Dissertation Abstracts International*. Section B: The Sciences and Engineering. 1998; 59:1871.

Table 1Application of Ecological Validity Framework in development of *Siempre Sale el Sol*

Domain	Definition	Application
1. Language	Appropriate and culturally sysonic.	Offering intervention in either English or Spanish. Appropriate informal (<i>tú</i>) language choice.
2. Person	Ethnic/racial similarities and differences between client and therapist in shaping therapy relationship.	Use of text and visuals depicting Latino adolescents and culture.
3. Metaphors	Symbols and concepts shared by cultural group.	Use of <i>dichos</i> (popular sayings) to present and reinforce educational material.
4. Content	Cultural knowledge including values, customs and traditions.	Integration of cultural values (e.g., familismo, personalismo, espiritismo, respeto).
5. Concepts	Consonance with the culture and context within the intervention model.	Addressing cultural rationales for onset of depression; utilization of services; use of traditional and mainstream treatments.
6. Goals	Support of positive and adaptive values from the culture of origin.	Adherence to cultural values as informing, influencing, and managing symptoms.
7. Methods	Consideration of culturally sensitive treatment methods.	Incorporation of values throughout session components to increase relevance and engagement; addressing pertinent factors such as barriers to treatment and life stressors in the presentation and management of depression.
8. Context	Consideration of social and economic context.	Presentation of process including immigration, acculturation and enculturation, barriers to treatment, and economic and social stressors.

Table 2

Expert interviews: Main themes

Core Theme	Sub-theme	# of interviewers raising theme
Need for innovative treatment strategies	Increased knowledge of depression	18 (56.3%)
	Use of cultural to increase engagement	24 (75%)
	Easily accessible	13 (40.6%)
	Cost-effective	5 (15.6%)
Mental health misinformation	Address stigma by educating and normalizing	15 (46.8%)
	Discuss etiology, symptoms and treatment of depression	18 (56.3%)
Address life stressors	Immigration and residency status	9 (28.1%)
	Poverty; low SES; neighborhood quality	13 (40.6%)
	Discrimination	5 (15.6%)
Increasing appeal and engagement	Make highly interactive	14 (43.8%)
	Use of visuals, videos, music	23 (71.8%)
	Include testimonials from other adolescents	9 (28.1%)
	Content should be basic reading level	8 (25%)
Inclusion of parents component	Increase child engagement	22 (68.8%)
	Assist with child completion of intervention	16 (50%)
	Acculturation and acculturation gap	30 (93.8%)
Concerns	Potential lack of privacy	6 (18.8%)
	Limited accessibility to disadvantaged families	8 (25%)