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EXPOSURE-BASED COGNITIVE BEHAVIORAL TREATMENT OF ANXIETY IN YOUTH: AN EMERGING CULTURALLY-PRESCRIPTIVE FRAMEWORK

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Abstract

This invited article presents a brief overview of the status of evidence-based psychosocial treatments for anxiety disorders in mainstream and/or Caucasian youth relative to the little data that has accumulated about psychosocial treatments for anxiety disorders in Latino youth. The article describes an emerging culturally prescriptive framework for working with minority youth and a corresponding exposure-based cognitive behavioral treatment program for anxious Mexican-origin youth. Preliminary treatment effect size data from ten treated youth is presented and, to illustrate the application of the program, a case sample of a Mexican-origin child is described. The article concludes with an evaluative summary and directions for future research.

KEY WORDS: *anxiety, children, treatment, cognitive behavioral therapy, exposure.*

Resumen

Este artículo presenta una breve descripción del estado de los tratamientos psicosociales basados en la evidencia para los trastornos de ansiedad en los niños en general y/o los niños caucásicos comparados con la poca información recopilada acerca de los tratamientos psicosociales para los trastornos de ansiedad en los niños latinos. Este artículo describe un marco prescriptivo que está surgiendo culturalmente para trabajar con jóvenes de grupos minoritarios y un programa de tratamiento cognitivo conductual basado en la exposición correspondiente para los niños ansiosos de origen mejicano. Se presentan los datos del tamaño del efecto del tratamiento preliminar en diez niños y, para ilustrar la aplicación del programa, se describe una prueba del caso de un niño de origen mejicano. Este artículo concluye con un resumen evaluativo y perspectivas para una futura investigación.

PALABRAS CLAVE: *ansiedad, niños, terapia cognitivo conductual, exposición*.

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Current census estimates indicate 42.7 million people of Latino origin reside in the United States, with 11.3 million being children and adolescents, rendering Latinos the largest ethnic minority group in the nation (United States Census Bureau, 2006). Although few studies have reported prevalence rates of phobic and anxiety disorders using samples of Latino youth, existing research indicates these rates are relatively high. For example, using a community sample Roberts, Roberts, and Xing (2006) found the prevalence of anxiety disorders was higher in Mexican-origin adolescents (8.1%) compared to Caucasians (5.8%). Moreover, in a sample of youth referred to an anxiety disorders specialty clinic, Ginsburg and Silverman (1996) found the prevalence of separation anxiety disorder was significantly higher in Cuban American (20%) compared to Caucasian youth (11%). These data are alarming because phobic and anxiety disorders (hereafter referred to as anxiety disorders) tend to run a chronic course and lead to significant impairment in major areas of a youth's life (e.g., school, family, and peer relationships) (McClure & Pine, 2006; Silverman & Pina, 2008). Anxiety disorders also place youth at risk for depression and substance abuse (Connolly, Bernstein, & Work Group on Quality Issues, 2007; Pine, Cohen, Gurley, Brook, & Ma, 1998; Woodward & Fergusson, 2001), both of which are significantly more prevalent among Latino adolescents and adults compared to Caucasians (National Council of *La Raza*, 2005).

While research data indicate a relatively high rate of anxiety disorders in Latino youth, as well as mental heath disparities in the sequelae of anxiety among Latino adolescents and adults, there is scarce research on the treatment of childhood anxiety disorders in this group. This lack of research is likely related to practical and cultural barriers in the recruitment and retention of Latinos into psychotherapy (Cabassa, Zayas, & Hansen, 2006; Kouyoumdjian, Zamboanga, & Hansen, 2003; Miranda, Azocar, Organista, Munoz, & Lieberman, 1996). For example, Canino and Spurlock (2000) and Woodward, Dwinell, and Arons (1992) note that there are differences in the service utilization patterns of Latinos for emotional and mental health problems (e.g., seeking services for mental health problems from sources outside the mental health system, such as teachers, folk healers, or church leaders). Flores, Abreu, Olivar, and Kastner (1998) and Vega and López (2001) found that practical issues linked to acculturation, immigration, and socioeconomic status (e.g., language, cultural differences between provider and family, transportation, long waitlists) were some of the main barriers faced by Latino parents seeking treatment for their children. Lastly, cultural and attitudinal factors (e.g., stigma, expectations and attitudes toward treatment) have been found to predict treatment (dis)engagement as well as unilateral treatment termination (Huey, 1998; Miranda et al., 1996; Vega & López, 2001). Because of these types of barriers and cultural incongruencies, applying psychosocial treatments created for Caucasians to ethnocultural minorities has been contraindicated (see APA, 1990a, 1990b, 2003; Constantine & Sue, 2005; Fouad & Arredondo, 2007) while adapting treatments for ethnocultural minorities has been advised (Malgady & Constantino, 1999; Wagner, 2003).

In this article, an emerging culturally prescriptive framework for the psychosocial treatment of minority youth is presented. We describe the initial cultural adaptation of an exposure-based cognitive behavioral treatment (CBT) for anxious Mexican-

origin youth based on this emerging culturally prescriptive framework. Preliminary treatment effect size data from ten youth who were invited to and completed the program also are presented. To illustrate the application of the program, a case sample of a Mexican-origin child who was treated is described. The article begins with a brief overview of the status of evidence-based psychosocial treatments for anxiety disorders in mainstream Caucasian youth relative to the little data that has accumulated about psychosocial treatments for anxiety disorders in Latino youth. We conclude with an evaluative summary and directions for future research.

Psychosocial treatments for anxiety disorders in youth

Evidence supporting the efficacy of psychosocial treatments for anxiety disorders in Caucasian youth includes over 50 single case design studies (e.g., Eisen & Silverman, 1993, 1998; Kane & Kendall, 1989) and over 30 group design studies (e.g., Beidel, Turner, & Morris, 2000; Kendall, 1994; Silverman et al., 1999b). Silverman, Pina, and Viswesvaran (2008) classified psychosocial treatments for childhood anxiety disorders according to Chambless et al. (1996) and Chambless and Hollon's (1998) criteria (e.g., *well-established*, *probably efficacious*) as well as presented findings from a series of meta-analyses. Briefly, although no treatment met the *well-established* criteria, individual cognitive behavior therapy (ICBT), group cognitive behavior therapy (GCBT), GCBT with parent involvement, GCBT for social phobia (SOP), and Social Effectiveness Training for Children (SET-C) with SOP each met criteria for *probably efficacious*. The other treatments were either *possibly efficacious* or *experimental*. In terms of the meta-analyses, Silverman et al. (2008) found support for the efficacy of CBT with no statistically significant differences between ICBT and GCBT regarding diagnostic recovery rates, anxiety reductions, and other symptom reductions (i.e., fear, depression, and internalizing and externalizing behavior problems). Improvements along diagnostic recovery rates, anxiety, and other symptom reductions were generally similar for individual and group CBT. Parent involvement in either ICBT or GCBT appeared to be slightly less favorable (but not statistically significantly) than parent non-involvement when youths' self-rated anxiety symptoms were considered. Parent involvement appeared to result in more favorable outcomes than parent non-involvement (although not statistically significant) when fear, depression, and internalizing and externalizing behavior were considered. This was found to be true in both ICBT and GCBT, with no statistically significant differences between the two formats (i.e., individual vs. group).

What about psychosocial treatments for anxiety disorders in Latino youth?

Regrettably, the burgeoning childhood anxiety disorder treatment research literature includes only three studies reporting data corresponding to how Latino youth respond to psychosocial treatments for anxiety disorders (i.e., Eisen & Silverman, 1998; Nock, 2002; Pina, Silverman, Fuentes, Kurtines, & Weems,

2003). In Table 1, these treatment studies are summarized in terms of the sample's characteristics, the type of treatment evaluated, and treatment outcomes. Table 1 also summarizes three other psychosocial treatment studies of Spanish adolescents with SOP (i.e., García-López, Turner, Beidel, Albano, & Sánchez-Meca, 2002; Olivares & García-López, 2001, 2002). These studies were included because of the similarities between Latino and Spanish youth (e.g., language, culture), although we recognize these ethnic groups are not culturally homogenous.

As shown in Table 1, Eisen and Silverman (1998) and Nock (2002) are single case design studies reporting data corresponding to Latino youth. Pina et al. (2003) is a comparative study of treatment effects and maintenance using data from two randomized clinical trials (i.e., Silverman et al., 1999a, 1999b). In the studies by Silverman and colleagues, treatment for anxiety disorders was delivered in English and participants were highly acculturated (and mostly Cuban American). Nock (2002) did not report acculturation data, whether the intervention was delivered in English (or Spanish), or if (and how) the intervention was culturally adapted for the Mexican-origin child. The remaining studies are: an open trial using Spanish adolescents (no control condition; i.e., Olivares & García-López, 2001), one non-randomized group design study of Spanish adolescents (García-López et al., 2002), and one case study of a Spanish girl (Olivares & García-López, 2002). In these studies, it was not reported how SET-C was modified for Spanish adolescents with SOP. Across these studies, treated youth showed improvements in terms of their primary/targeted diagnosis (Olivares & García-López, 2001 did not report diagnostic recovery rates) and there also were improvements in youth and parent rating scales with some expected variations (e.g., in Eisen & Silverman, 1998 there was no improvement on negative cognitions for one of the two Latino child participants because cognitive training was not provided to this child).

As also shown in Table 1, exposure-based CBT procedures seem to produce relatively similar results in Latino compared to Caucasian youth, although data are limited to one study. As noted above, in Pina et al. (2003) data corresponding to 52 (40%) Latino and 79 (60%) Caucasian youth (N = 131, 46% girls; ages 6 to 16 years) with anxiety disorder diagnoses were examined. All child-parent dyads were highly proficient in English and all treatment and assessment procedures were conducted in English. Latino youths (mostly Cuban Americans) responded favorably to the exposure-based CBT procedures and similarly to Caucasian youth. There were no statistically significant differences (and statistical equivalence, Rogers, Howard, & Vessey, 1993) along most rating scales and diagnostic recovery rates between Latino and Caucasian youth (84.2% vs. 83.9%, respectively). However, treatment gains on the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978), a primary child self-report anxiety symptom measure, revealed significantly greater gains for Caucasian than for Latino youths. As noted by Pina et al. (2003) it is important to establish whether this RCMAS finding replicates prior to speculation on its possible meaning. Nonetheless, it is crucial to highlight the remarkably consistent pattern of treatment gains and maintenance across both ethnic groups and the potential that exposure-based CBT seems to have for reducing anxiety disorders in Latino youth.

Table 1
Studies Reporting Hispanic/Latino Youths' Response to Psychosocial Treatments for Phobic and Anxiety Disorders

Study	*Sample*	*Treatment*	*Treatment Response*
Eisen & Silverman (1998)	2 Latino boys (8 and 11 yrs. old) with OAD	Prescriptive treatment (PT): (a) exposures + cognitive training for cognitive symptoms, or (b) exposures + relaxation training for somatic symptoms. Non-prescriptive treatment (NPT): (a) exposures + cognitive training for somatic symptoms or (b) exposures + relaxation training for cognitive symptoms. Treatment lasted 10 sessions administered over 5 weeks.	Neither boy met criteria at posttest for OAD based on the ADIS-C for DSM-III-R (child and parent versions). The 8 year old boy received PT(b) and at posttest showed clinically significant improvements on the CBCL somatic complaints subscale. There also was improvement on heart rate during a behavioral approach task (BAT), negative cognitions as reported in daily diaries, and diagnostic severity rated by parent and clinician. There was no improvement on the CASI or the worry/oversensitivity factor scale of the RCMAS. There was deterioration on the CNCEQ. The 11 year old boy received first NPT(b) and then PT(a). After NPT(b), there was improvement on the CNCEQ and diagnostic severity rated by parent and clinician. There were improvements on the worry/oversensitivity factor scale of the RCMAS, negative cognitions as reported in daily diaries, and heart rate during a BAT. There was deterioration on the CASI and CBCL somatic complaints subscale. After PT(a) there was improvement on the worry/oversensitivity factor scale of the RCMAS, negative cognitions as reported in daily diaries, CNCEQ, heart rate during a BAT, and diagnostic severity rated by parent and clinician. There was deterioration on the CASI. At the 6-month follow-up, diagnostic recovery was maintained for both boys. Scores remained at posttest levels for the 8 year old boy on the CNCEQ, CBCL somatic complaints subscale, and diagnostic severity as rated by parent and clinician. There was continued improvement on the worry/oversensitivity factor scale of the RCMAS and negative cognitions as reported in daily diaries. There was deterioration on the CASI and heart rate during a BAT. For the 11 year old boy, scores remained at posttest levels on the CNCEQ and diagnostic severity as rated by parent. There was continued improvement on the worry/oversensitivity factor scale of the RCMAS, negative cognitions as reported in daily diaries, CASI, and diagnostic severity as rated by clinician. There was deterioration on CBCL somatic complaints subscale and heart rate during a BAT.

Olivares Rodríguez & García-López (2001)	11 Spanish adolescents (8 girls; Mean age = 15.1 yrs. old) with generalized SOP	Intervención en Adolescentes con Fobia Social Generalizada (IAFSG). Treatment lasted 12 sessions administered over 12 weeks.	Posttest diagnostic status was not reported. There was statistically significant improvement on the SPAI, and on the FNE, SAD-N, SAD-G subscales and the total scale of the SAS-A. No follow-up data were reported.
Olivares Rodríguez & García-López (2002)	1 Spanish girl (15 yrs. old) with generalized SOP	Social Effectiveness Training for Adolescents-Spanish version (SET-Asv). Treatment lasted 29 sessions administered over 17 weeks.	At posttest, the 15 year old girl did not meet criteria for generalized SOP based on the ADIS-IV for DSM-IV. There also were improvements on the FS and SPAI, on the FNE, SAD-N, SAD-G subscales and the total scale of the SAS-A, PRCS, Rosenberg (1965) Self-Esteem scale, and EHSPA. At the 12-month follow-up, gains were maintained on the PRCS scores and so was diagnostic recovery. There was continued improvement on the FS subscale and the total scale of the SPAI, on the FNE, SAD-N, SAD-G subscales and the total scale of the SAS-A, PRCS, Rosenberg Self-Esteem scale, and EHSPA.
García-López, Turner, Beidel, Albano, & Sánchez-Meca, (2002)	59 Spanish adolescents (46 girls; Mean age = 15.92 yrs. old) with generalized SOP	SET-Avs (*n* = 14), Cognitive-Behavioral Group Therapy for Adolescents (CBGT-A, *n* = 15), IAFSG (*n* = 15), no-treatment control (*n* = 15). SET-Avs lasted 29 sessions administered over 17 weeks. IAFSG lasted 12 sessions administered over 12 weeks. CBGT-A lasted 16 sessions administered over 14 weeks.	At posttest, diagnostic recovery rates were 35.71% for SET-Asv, 53.33% for CBGT-A, 33.33% for IAFSG and 13.33% for the no-treatment control, in terms of generalized SOP. There were no statistically significant differences between conditions on posttest diagnostic rates. Based on the SOP module of the ADIS-IV, adolescents in SET-Asv and IAFSG endorsed significantly fewer SOP symptoms than those in the no-treatment control condition. At the 12-month follow-up, diagnostic recovery rates were 57.14% for SET-Asv, 46.67% for IAFSG, 26.67% for CBGT-A and 6.67% for the no-treatment control condition with the only statistically significant difference being between SET-Asv and the control. García-López et al. (2006) reported results of a 5 year follow-up study of 23 adolescents with generalized SOP who received SET-C (*n* =7), GCBT (*n* = 8), or AFSG (*n* = 8) as part of the Garcia-López et al. (2002) study. At the 5-year follow-up, participants' mean age was 20.83 years (range = 20 to 22 years) and generalized SOP diagnostic recovery rates were identical for GCBT and IAFSG, 50%; and the rate was 43% for SET-Avs. There was maintenance of treatment gains over the 5-years across all three treatments on the SPAI, the SOP module of the ADIS-IV, on the FNE, SAD-N, SAD-G subscales and the total scale of the SAS-A, with again no significant treatment differences at the 5 year follow-up.

Nock (2002)	1 Latino boy (4 yrs. old) with SP (type: liquids and solid foods)	Modeling, in-vivo graduated exposure using contingency management. Treatment lasted 21 sessions administered over 27 weeks.	At posttest, the boy did not meet criteria for SP based on the K-SADS-PL (DSM-IV). There was a statistically significant reduction in food-related anxiety during a BAT. Food avoidance of target food was reduced to zero during a BAT and there was no food/eating functional impairment at home, school or with peers as rated using the K-SADS-PL impairment scales. At the 6-month follow-up, all gains were maintained across these measures.
Pina, Silverman, Fuentes, Kurtines, & Weems (2003)	52 Latino children (23 girls; Mean age = 10.21 yrs. old) with OAD (*n*=10), SAD (*n*=4), SOP (*n*=10), SP (*n*=23), other (*n*=5). 79 Caucasian children (44 girls; Mean age =9.51 yrs. old) with OAD (*n*=15), SAD (*n*=4), SOP (*n*=7), SP (*n*=46), other (*n*=7)	Exposure-based cognitive-behavioral treatment. Treatment lasted 10-12 sessions administered over 10-12 weeks.	At posttest, 84.2% of Latino and 83.9% of Caucasian youth did not meet criteria for their primary/targeted diagnosis based on the ADIS-C for DSM-III-R (child and parent versions). There were significant improvements on the RCMAS (child and parent versions), FSSC-R parent version, and CBCL internalizing and externalizing subscales. There was no significant improvement on the FSSC-R for either Latino or Caucasian youth. Caucasian youth showed a significantly higher pre to posttest effect size on the RCMAS compared to Latino youth. At the follow-ups (3- 6- and 12-month), scores remained below posttest levels on all child and parent measures with no significant differences between the ethnic groups on any of the measures.

Note. OAD = overanxious disorder; ADIS-C = Anxiety Disorders Interview Schedule for Children (Silverman & Nelles, 1988); DSM-III-R = Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1987); CBCL = Child Behavior Checklist (Achenbach, 1991); CASI = Childhood Anxiety Sensitivity Index (Silverman, Fleisig, Rabian, & Peterson, 1991); RCMAS = Revised Children's Manifest Anxiety Scale (Reynolds & Richman, 1978, 1985); CNCEQ = Children's Negative Cognitive Error Questionnaire (Leitenberg, Yost, & Carroll-Wilson, 1986); SOP = Social Phobia; SPAI = Social Phobia and Anxiety Inventory (Turner, Beidel, Dancu, & Stanley, 1989); SAS-A/FNE = Social Anxiety Scale-Adolescent/Fear of Negative Evaluation Scale; SAS-A/SAD-N = Social Anxiety Scale-Adolescent/ Social Avoidance Distress Scale-New; SAS-A/SAD-G = Social Anxiety Scale-Adolescent/Social Avoidance Distress Scale-General; SAS-A = Social Anxiety Scale for Adolescents (La Greca & López, 1998); ADIS-IV = Anxiety Disorders Interview Schedule for DSM-IV (DiNardo, Brown, & Barlow, 1994); PRCS = Personal Report of Confidence as a Speaker (Paul, 1966); EHSPA = Escala de Habilidades Sociales para Adolescentes/Scale of Social Skills for Adolescents (Méndez, Martínez, Sánchez, & Hidalgo, 1995); SP = specific phobia; K-SADS-PL = Schedule for affective disorders and schizophrenia for school-age children - parent and lifetime version (Kaufman et al., 1997); FSSC-R = Fear Schedule Survey for Children - Revised (Ollendick, 1983).

Based on this literature it seems that exposure-based CBT is a promising treatment for anxiety disorders in Latino youth. A similar conclusion also was reached by Huey and Polo (2008) in a recent review and meta-analyses of intervention studies that included minority youth participants. More specifically, Huey and Polo found that treatments overall yielded medium effect sizes (e.g., an average effect size of .57 was found when comparing treatment to no-treatment control conditions). It also was found that ethnicity (African American, Latino, mixed/other minority), problem type, clinical severity, diagnostic status, and culture-responsive treatment status did not moderate outcome. However, a main conclusion of Huey and Polo (2008) was: "the literature is characterized by unrepresentative samples, Eurocentric outcome measures, inadequate sample sizes, and few direct tests of key *ethnocultural* theoretical assumptions" (p. 294) (italics added for clarity). Thus, there continues to be a gap in the literature in terms of research that identifies the extent to which culturally adapted treatment and service models are needed for minority populations. Moreover, there is a gap in understanding which facets of existing treatments need to be adapted and for whom. And, finally, there is little data indicating which modalities and procedures should be used specifically in the treatment of minority youth.

A guiding framework

To tackle these issues, we are formulating a conceptual framework that builds on past cultural adaptation research to address current cultural challenges. Briefly, over the last two decades widespread recognition of health disparities among minorities led to advances in clinical and translational behavioral research. These began initially with the examination of race and ethnicity broadly defined (e.g., Afrocentric approaches to prevention) and, as a clearer understanding of diversity within ethnic categories evolved, research questions were further refined and specific cultural subgroups (e.g., Mexican instead of Hispanic/Latino) were targeted for investigation. This research resulted in frameworks for developing more culturally attractive, engaging, and thus more efficacious interventions (e.g., Kurtines & Szapocnik, 1996; Miranda, 1996; Vega, 1992). However, our emerging framework is based on recent data showing that when minorities receive current culturally-adapted services (e.g., Hispanicized programs), less acculturated patients respond well while their more acculturated counterparts do not (Griner & Smith, 2006). Conversely, highly acculturated minorities respond relatively well to standard care while less acculturated minorities do not (e.g., Pina et al., 2003; McCabe, 2002). Consequently, our framework proposes a "culturally prescriptive" approach to intervention based on an individual's cultural characteristics.

Ethnocultural minorities in the U.S typically maintain (with varying degrees) cultural ties to their places of origin (enculturation), acquire aspects of the host culture, and undergo dual cultural adaptations (e.g., Berry, 2003; Gonzales et al., 2002; Rudmin, 2003; Tsai, Chentsova-Dutton, & Wong, 2002). It is not surprising then that the therapeutic effects of current culturally adapted interventions are

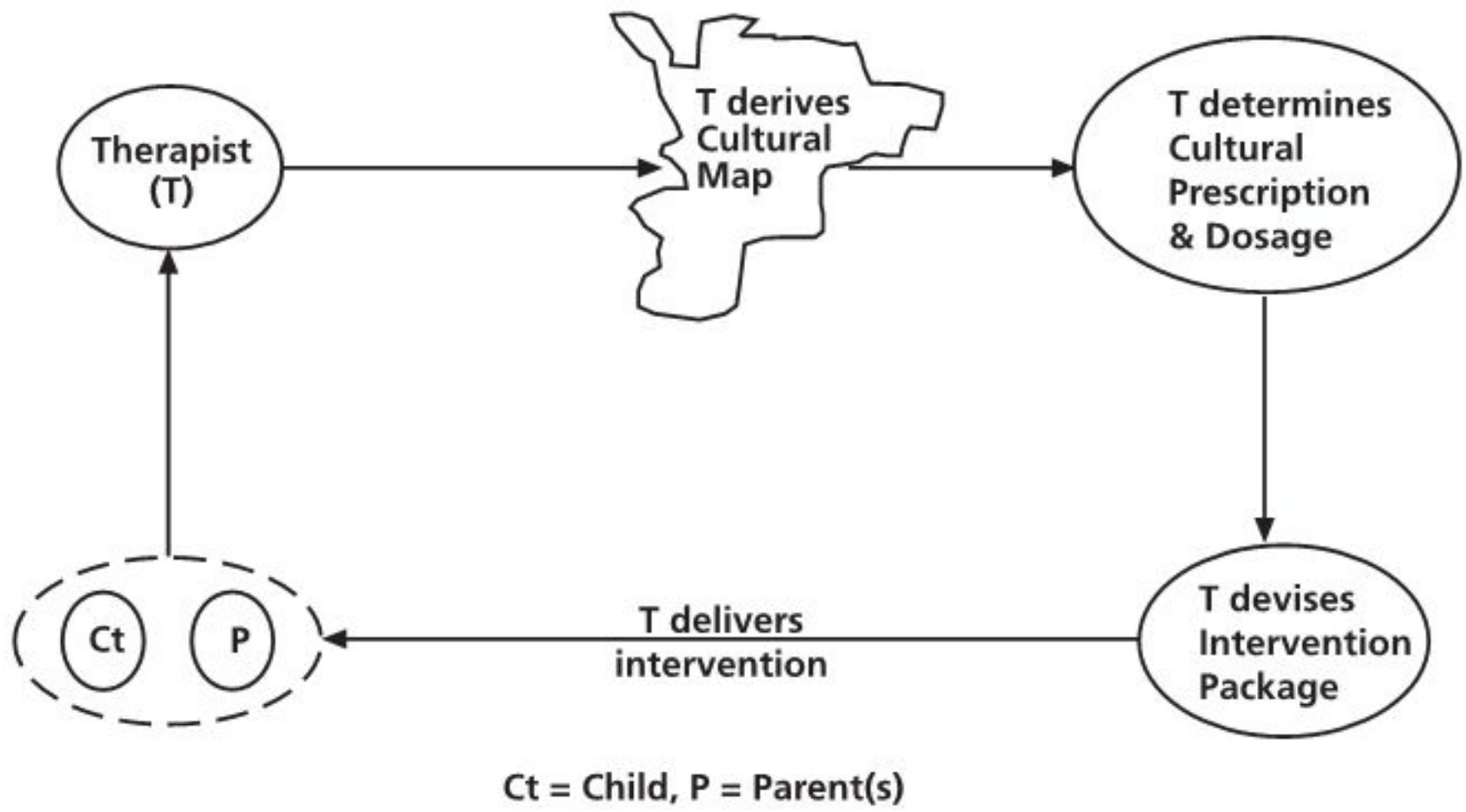
moderated by acculturation. For instance, trials of Hispanicized interventions show greater effects for Latinos with low levels of English language proficiency (or low acculturation levels) (e.g., Gil et al., 2004; Griner & Smith, 2006; Litrownik et al. 2000). Compartmentalized (e.g., Mexicanized) interventions also run the risk of imposing stereotypical approaches and delivering program content that does not resonate with the participant (e.g., Marsiglia et al., 2005). Consequently, interventions for minorities based on ethnic compartmentalization (e.g., Latino, Puerto Rican, or Mexican) have limited potential for Latinos residing in the U.S.

Another point to consider is that ethnic groups are becoming increasingly fragmented (e.g., Mexican-Cuban, African-American-Pacific Islander) (Ávila-Molero, 2003; Etzioni, 1998; Falicov, 2003; MacManus & Morehouse, 1997). In this era of immigration and mobility, subpopulations are undergoing increased intra-cultural hybridization. Current cultural interventions are not framed to accommodate cultural *pluralism*. Moreover, current approaches do not address contextual variations within distinct geographical niches (e.g., communities and neighborhoods). For example, the experiences of a Cuban-Chinese-American residing in Little Havana (Miami, FL) will differ greatly from that of a Cuban-Chinese-American residing in the Southwest United States. A minority individual's daily challenges (e.g., facing discrimination) are likely governed by the community in which s/he lives and the decisions s/he makes in response to social demands (e.g., use Spanish as currency or not). These types of cultural and contextual fragmentations have rendered most cultural intervention frameworks outdated for much of the minority population.

Realization of the above noted issues has led to the proposal of our emerging culturally prescriptive intervention framework. This framework proposes that culture should be defined vis-à-vis a cultural mapping approach. The cultural mapping approach entails using potential cultural factors as indicators and contra-indicators of treatment implementation strategies and for tailoring aspects of a treatment to each individual. For example, one unambiguous factor is language. That is, a monolingual Spanish person needs services in Spanish, but Spanish services would be contraindicated for a Mexican-American person who might have low Spanish language proficiency. Another potential factor for tailoring treatment to fit the individual is acculturation/enculturation. For instance, the strategy of incorporating Spanish language sayings or refrains (*dichos*) into current Hispanicized treatments might be indicated for less acculturated persons but may be contraindicated for their more acculturated counterparts.

The culturally prescriptive framework is illustrated in Figure 1 in terms of the treatment of minority youth. As depicted in Figure 1, the client (child) and parent act as cultural brokers who provide information to the therapist for deriving a cultural map (e.g., a report about the dyad's affiliation with values from the culture/family of origin and the host culture). With the cultural map, the therapist determines a cultural prescription. For example, if the cultural map suggests high levels of *Familismo* support then this aspect of the culture should be considered in the intervention. If the cultural map suggests low levels of religiosity then this aspect of Latino culture should not be infused into the intervention. As research based on the cultural mapping approach accumulates, interventionists should be able to devise

Figure 1
Emerging culturally prescriptive framework for the psychosocial treatment of ethnocultural minority youth



intervention packages that include evidence-based cultural modules for working with minority youth. For example, interventionists could utilize intervention modules focused on changing developmentally inappropriate *Familismo* obligations known to increase/maintain anxiety symptom levels in youth. Overall, the cultural mapping approach will likely make a broad contribution to the field because it offers a single-formulation appropriate for developing, testing, and disseminating treatments for ethnocultural minorities across interventions and modalities.

Acercamiento: a program for anxiety disorders in Mexican-origin youth

To refine and further develop the emerging culturally prescriptive framework described above, the first author has launched a program of research focused on psychosocial interventions for anxiety in Mexican-origin youth. For example, a treatment program consisting of 10 sessions (delivered over 10 to 12 weeks) which is based on the standard exposure-based CBT program articulated by Silverman and Kurtines (1996) is serving as a point of reference. In Session 1 the focus is on building rapport with the family. In this first session, the behavioral and cognitive aspects of the program are described. The session concludes with discussion of the effects of anxiety and fear on the child and family and the notion of teaching the child learn to become less scared or anxious. The interventionist also discusses some of the reasons why the child might be anxious (e.g., intersections between biomarkers, life events, emotion [dys]regulation) in an effort to alleviate any guilt on the part of the parent(s). Each session thereafter starts with a review of the previous

session's content and the interventionist, child, and parent(s) begin to evaluate progress. The first in-session exposure is conducted in Session 2 and a fear/anxiety hierarchy is constructed after the exposure. At the end of Session 2, a plan for conducting an out-of-session exposure is devised and the child and parent(s) are asked to construct a rewards menu. In Sessions 3 and 4, in-session exposures are administered and out-of-session exposures are prescribed. Relaxation is introduced in Session 3 and cognitive training in Session 4. In Session 4 (and thereafter), barriers to completing out-of-session assignments are evaluated and solution plans are devised as necessary. At the end of every session out-of-session tasks are prescribed (as well as practice schedules). In the subsequent sessions parents are taught to devise and prescribe out-of-session exposures and tasks (and practice schedules). In Sessions 5 through 9 the focus is on monitoring the child and parent(s) during the implementation of treatment strategies. In Session 10, treatment progress is reviewed as well as the importance of practice. This last session concludes with a discussion of generalization and relapse prevention.

As the description above indicates, several standard exposure-based CBT procedures (e.g., exposures) are retained in the current adaptation. The theoretical rationale for including these components in the treatment program is based on the contextualist orientation advocated by Kurtines and Szapocznik (1996). Simply stated, some treatment components are thought of as transcultural (e.g., gradual behavioral exposures); however, what seems important for treatment engagement and subsequently changes in cognition, emotion, and behavior is *how* these components are "packaged and delivered." To this end the ecological validity and cultural sensitivity framework of Bernal and colleagues' (Bernal, Bonilla, & Bellido, 1995; Bernal & Sáez-Santiago, 2005) which identifies eight tailoring parameters that should be considered when culturally adapting psychosocial interventions was utilized. The framework of Bernal and colleagues emphasizes (1) language, (2) persons, (3) metaphors, (4) content, (5) concepts, (6) goals, (7) methods, and (8) contexts. This framework has been used to adapt other psychotherapies for Latinos [e.g., CBT for depression and interpersonal psychotherapy for depression in Puerto Rican adolescents (Rosselló & Bernal, 1996), parent-child interaction therapy for behavior problems in pre-schoolers for Mexican American (McCabe, Yeh, Garland, Lau, & Chavez, 2005) and Puerto Rican families (Matos, Torres, Santiago, Jurado, & Rodriguez, 2006)]. Bernal and colleagues (1995, 2005) recommend that particular attention be paid to developmental, technical, and theoretical issues throughout the adaptation process. Below the cultural adaptations made to exposure-based CBT for anxiety disorders in Mexican-origin youth are briefly described using each of these eight cultural parameters as a guide. Developmental, technical, and theoretical issues relevant to the cultural adaptation of exposure-based CBT for anxiety disorders in Mexican-origin youth are discussed as well.

LANGUAGE. The language of the treatment should be culturally appropriate and syntonic. Standard exposure-based CBT was developed to be administered in English. For example, most anxiety treatment programs incorporate the use of acronyms (e.g., FEAR and STIC in Kendall & Hedtke, 2006; STOP in Silverman &

Kurtines, 1996; FRIENDS in Shortt, Barrett, & Fox, 2001) and English acronyms do not readily translate into Spanish. Consequently, cultural adaptation along this parameter entailed translating treatment materials into Spanish, developing alternative implementation strategies, and offering treatment itself in Spanish or English. Language choice is based on the child and parents' language preference, and both English and Spanish may be used with some families. For example, a substantial proportion of Latinos, including Mexican-origin youth and families, gradually acquire aspects of the host culture (including language) or undergo dual cultural adaptation processes (including having preferences for when and how to use English versus Spanish) (e.g., Berry, 2003; Gonzales, Knight, Morgan-López, Sáenz, & Sirolli, 2002; Rudmin, 2003; Tsai, Chentsova-Dutton, & Wong, 2002). As such, some youth and parents are fluent in English and prefer treatment in English. There are other parents who are fluent in English but prefer treatment in Spanish and some youth also are fluent in Spanish but prefer treatment in English. For this reason, the treatment manual (Pina, 2007) explains when and how to use English and/or Spanish intermittently (e.g., for praise, to convey a key issue such as the importance of practice). Moreover, interventionists are trained to be attuned to various terminology used by youth and families to talk about the problem of excessive fear and anxiety. In one case, the father of a child with SOP described the problem not as fear of social situations but as excessive *vergüenza* (bashfulness, embarrassment, or shame). Because interventionists are sensitized to these types of language subtleties during the initial training sessions (and also during supervision), language is used in a way that is consistent with the preferences and cultural characteristics of the particular client.

PERSONS. Interventionists should be attuned to the characteristics of the cultural group, and the child and parent should be comfortable with the characteristics of the interventionist. For example, the interventionist is asked to share personal anecdotes to highlight cultural similarities between himself/herself and the family (e.g., favorite dishes like *posole*, events like *quinceañeras*, etc.) throughout the intervention. Cultural adaptation along this parameter also entailed emphasizing to interventionists the need to show flexibility in accommodating implementation strategies and treatment goals to the cultural and socioeconomic characteristics of each family. For example, in one case a mother reported giving her child holy water to drink when the girl was scared or anxious. Another mother, reported giving her boy an herb tea prescribed by a *curandera* (a female folk medicine practitioner) when the boy was scared or anxious. In both these cases, the interventionist showed acceptance of the mother's beliefs about the calming properties of the holy water/herb and used the conversation to segue into how breathing and muscle relaxation for anxiety-related somatic symptoms also could help reduce anxiety. In this way the interventionist incorporated discussion of these values/beliefs with a discussion of a standard exposure-based CBT treatment component. Interventionists are instructed during initial training sessions and also during supervision to accept and work within the contexts of each family's cultural values/beliefs.

METAPHORS. Treatments should use symbols and concepts that are shared by the cultural group. In standard exposure-based CBT the symbols and concepts used to implement treatment are familiar to Mexican-origin youth and parents. For example, a stick figure is used to teach three ways anxiety shows itself (i.e., physiologically, cognitively, and behaviorally). Another symbol used in standard exposure-based CBT is a ladder, which is used to teach the concept of and plan gradual exposures to feared objects or situations. Because these symbols are understood by Mexican-origin families, they were not adapted. However, other metaphors were added to the culturally adapted treatment as suggested by Zúñiga (1992), Altarriba and Santiago-Rivera, (1994), Roosa, Dumka, Gonzales, and Knight (2002), and Comas-Diaz (2006). The culturally adapted exposure-based CBT manual presents and defines Mexican *dichos* (sayings), proverbs, and refrains that can be incorporated into treatment delivery. Metaphors also are infused into the clinic's space by way of wall murals stating Mexican refrains (e.g., *El miedo tiene mucha imaginación y poco talento*; fears are rich in imagination and poor in intelligence) (Martínez, 2004). Families are received in a waiting room that contains Spanish newspapers, Spanish parenting pamphlets, and local magazines. The chairs in the waiting room are red and area rugs green; the colors of the Mexican flag. Furthermore, the culturally adapted treatment program is referred to as *Acercamiento*. In the context of Latino culture, *acercamiento* can be defined as coming together as a family (and among faithful Latinos, *acercamiento* can be defined as moving closer to God). In the context of exposure-based CBT, *acercamiento* translates to getting closer or approaching a feared stimulus or situation (i.e., graduated behavioral exposures). Because of these associations, *acercamiento* becomes a cultural idiom that can be used to describe the treatment's main component (i.e., exposure), format (i.e., family), and facilitative strategies (e.g., using family support as positive reinforcement). Thus, in treatment, emphasis is placed on this meaning of *acercamiento* as a cultural idiom.

CONTENT. Treatments should be consonant with the values, customs, traditions, and history of the cultural group. Cultural adaptation along this parameter entailed incorporating into the treatment key values that seemed particularly relevant (i.e., *personalismo*, family support, family referent, family obligations, religion) to Mexican-origin families. Consequently, the adapted treatment manual describes various customs, traditions, and aspects of the cultural group. For example, the manual outlines the value *personalismo* and how it can be infused into the treatment to facilitate engagement. The manual suggests that early in the treatment, the interventionist should inquire about weekly family activities, people living at home, relatives in the country of origin, etc. The adaptation also includes aspects of Mexican history in that, for example, handouts have expressions such as "*Si se puede*" (Yes, we Can), which is a phrase coined by nationally recognized civil rights leader Cesar Chavez, an Arizonian and grandson of Mexican migrant farm workers. Altogether, values and customs are integrated into the treatment as necessary given that there are variations in the extent that Mexican-origin youth and families identify with and practice aspects of Mexican culture.

CONCEPTS. The concepts or theoretical orientation of treatments should be consonant with the cultural group. In standard exposure-based CBT the theoretical orientation (i.e., social learning and cognitive theory) is consonant with Mexican culture and thus this aspect of the standard treatment was not adapted. For example, many parents tend to trace back the child's fear to a conditioning event or to what they call "absurd beliefs" (*cosas que no tienen sentido*) about an object or situation being scary. These examples are used to convey to the parents and the child the idea that the intervention is "a learning program." In fact, parents call the treatment sessions, *las clases* (the lectures) and the interventionist delivers treatment in a room furnished with a dry-erase board, a round table, and four chairs. There are other concepts in exposure-based CBT that are consonant with the way Mexican-origin youth and families think and talk about excessive anxiety and fear, including (but not limited to) knowledge about the relation between fear/worry and physiological/somatic symptoms.

GOALS. Treatment goals should be framed within the cultural values and expectations of the cultural group. The overall goal of exposure-based CBT (i.e., to produce child behavior change in terms of becoming less scared or worried) is consonant with the expectations of Mexican culture. Thus, the overall goal of standard exposure-based CBT was not adapted. However, in the culturally adapted treatment the methods for outlining the goals and the plans for attaining them are framed within the values and expectations of the cultural group (e.g., family support, referent, obligations, respect). For example, in the adapted treatment, the value of respect is considered and thus the parent(s) is asked first to suggest treatment goals for the child. Parent goals are discussed, evaluated, and taken into consideration early in the treatment (Sessions 1 and 2). Parent goals are revised as treatment progresses to accommodate the child's goals and his/her developmental stage. In one case, an adolescent presented with generalized anxiety disorder (uncontrollable worries about his mother/siblings' health, school work, and family finances; all accompanied by sleep problems and irritability), and his mother had brought him to treatment because his school absences were exacerbating. A main goal suggested by the mother was for the adolescent to attend school on a regular basis. A main goal suggested by the adolescent was for him to learn to control his worries. As treatment progressed, it became evident that the adolescent's sense of obligation and responsibility for taking care of his five younger siblings as a member of a single parent home was a main source of anxiety as well as his inability to attend school on a regular basis. With this information, the interventionist considered the Mexican values of respect (between the adolescent and mother) and family obligations (adolescent toward the family) in devising, with the adolescent and his mother, a final set of goals and plans for achieving the goals. The culturally adapted treatment manual describes how treatment goals should be framed within the cultural values and expectations of Latino culture in general and Mexican culture in particular. Interventionists also are instructed during initial training sessions and during supervision to outline and refine treatment goals in a manner that is consonant with each family's cultural values and context.

METHODS. Treatment methods should be framed within the cultural values of the group. In standard CBT, treatment is most commonly delivered in individual or child-group format (see Silverman et al., 2008). However, Latino respondents have indicated preference for services in family format (Wagner, 2003). The first author investigated this issue further by conducting individual interviews with three first generation and three immigrant Mexican mothers of clinically anxious youth. During the interview, a script was read to parents that described the various CBT formats evaluated in the childhood anxiety research literature (Kendall, 1994; Kendall et al., 1997; Silverman et al., 1999a) including the formats used in the Australian adaptations of CBT for anxiety (e.g., Barrett, 1998; Barrett, Dadds, & Rapee, 1996; Shortt et al., 2001). The script also included a description of a format in which the child and the parent participate in the same session throughout the treatment (as described in Pina, 2005; under the mentorship of W. K. Silverman). Participants were invited to comment on the formats they found most appealing or unappealing. Evaluation of parents' responses showed that five of the six mothers reported that the most appealing format was the one where the child and the parent(s) participate in the same session throughout treatment (one immigrant mother identified the individual with parent format used in Barrett et al. (1996) as most appealing but still considered the child and the parents in the same treatment session as second most appealing). The remaining formats were considered unappealing. Given the importance Mexican-origin families place on the family unit, this preference is not surprising and this is the format of the culturally adapted treatment. When these mothers were asked about some of the reasons why the "parent(s) present" format was most appealing, they claimed: "parents would prefer to know what is happening during the child's sessions" and "parents could learn how to manage the child's behavior." The main reason cited for why the other formats were unappealing was: "concerns about what might happen during the child's treatment sessions." The implication here is that if treatment is offered to Mexican-origin families without parents present, parents might be inclined to discontinue treatment prematurely.

CONTEXT. This parameter refers to the economic, social, and individual contexts of the presenting problem. This parameter was carefully considered in the cultural adaptation of exposure-based CBT and in the training of interventionists. Some of the issues considered in the cultural adaptation were: economic and living conditions, recency and type of immigration, treatment barriers, and the child's developmental stage. For example, many Mexican families in Arizona live in poverty. Consequently, the culturally adapted treatment is offered free-of-charge and in a location with nearby bus stops. Also, interventionists had to be trained to identify and offer the family information about free or low cost health and food-rescue organizations (e.g., dental care, food bank locations). The site where the adapted intervention is delivered also provides childcare and free commercially available snacks. An additional and very important consideration is confidentiality in the current immigration climate in the state of Arizona and the U.S. in general. Although immigration status does not come up during the sessions, a National Institute for Mental Health Certificate of Confidentiality was obtained to make the families more comfortable.

DEVELOPMENTAL, TECHNICAL, AND THEORETICAL ISSUES. Particular attention was paid to developmental, technical, and theoretical issues in the cultural adaptation of exposure-based CBT and the training for delivery of the treatment program. One re-emerging issue that may be related to development is that young children deny or underreport the severity of symptoms soon after treatment is initiated (as early as session 2 and 3). For example, in one case, an eight-year-old boy reported his fear of darkness as a 2 (on a 0 to 8 scale) while both his parents and the interventionist estimated it at a 7 (on the 0 to 8 scale). The parents reassured the child that no one would be disappointed or upset with him if the number was higher. This reassurance resulted in a more realistic child reported fear rating (i.e., 6). A technical issue that has emerged during treatment is that sometimes families need more time and a single session then must be delivered over two visits. This happens when interventionists have to deliver treatment in both English and Spanish. This technical issue underscores the importance of "therapist flexibility" in the implementation of culturally adapted treatments. Finally, a theoretical issue considered in the cultural adaptation was removing language associated with mental illness (such as "symptoms" and "disorder") from the intervention. Interventionists are trained to use language such as "situations" and "difficulties" to reduce stigma, promote participation, and possibly eliminate the "sick role".

Initial application of the Acercamiento Program

The behavioral treatment-development and stage model initially articulated by Onken, Blaine, and Battjes (1997) and refined by Rounsaville, Carroll, and Onken (2001) is being used by the first author to guide empirical validation of the *Acercamiento* CBT program for anxiety disorders in Mexican-origin youth. This model proposes 3 stages of research: (1) innovation (e.g., conducting observations and developing a treatment protocol by means of exploratory work with a small number of cases, manual writing/revising, and training interventionists and carrying out a small randomized pilot study), (2) efficacy (e.g., demonstrating internal validity by means of a randomized clinical trial that uses either control or treatment as-usual conditions as well as analyses of the mediators and moderators of treatment outcome), and (3) effectiveness (e.g., demonstrating external validity by means of transporting the intervention from the highly controlled laboratory environment, such as university research laboratories, to community and hospital-based settings to test its effectiveness).

As part of research stage 1 (innovation), ten families were invited to participate in and subsequently completed an initial pilot application of *Acercamiento* CBT for anxiety disorders. In each session cultural components were implemented in a flexible manner because at this stage of program development the objective is to gain some sense about the types of strategies that would need to be considered when developing and refining specific cultural intervention modules. Although cultural components and implementation strategies were implemented in a flexible manner, there was fidelity with regard to the delivery of the exposure-based cognitive behavioral components hypothesized to produce child behavior change (e.g., graduated in-vivo exposures).

For this initial open trial pilot study, youth were screened using the ADIS-IV: C/P (Silverman & Albano, 1996). Families were invited to participate if the following set of criteria was met: (a) the child met diagnostic criteria for a primary anxiety disorder diagnosis of specific phobia, separation anxiety disorder, SOP, or generalized anxiety disorder; (b) the child was between 7 and 10 years old; (c) the child was of Mexican-origin (i.e., born to either an immigrant Mexican or Mexican American mother, father, or both). Families were not invited to participate (and referred for services elsewhere, as necessary) based on the following set of criteria: (a) youth and/or parent(s) met diagnoses (e.g., primary or additional) for any one of the following: pervasive developmental disorders, mental retardation, organic mental disorders, schizophrenia and other psychotic disorders; (b) youth and/or parents showed high likelihood and/or serious intent of hurting themselves or others; (c) youth were receiving another psychosocial treatment.

Preliminary results

Pretest to posttest analyses of RCMAS data suggest that the adaptation seems promising. The time (pre-to-post) effect was statistically significant (t [9] = 4.28, $p < .01$; $d = 1.3$). Mean Total Anxiety scale scores decreased from 12.6 (SD = 7.14) before treatment to 3.6 (SD = 4.06) after treatment. Additional statistical significant time effects were found on the RCMAS's Physiological Anxiety scale (t [9] = 2.71, $p < .03$; $d = 0.70$), Social-Concerns Concentration scale (t [9] = 2.80, $p < .02$; $d = 1.0$), and Worry/Oversensitivity scale (t [9] = 5.08, $p < .01$; $d = 1.4$). Scale scores decreased on the Physiological Anxiety scale (from 4.3 [3.23] to 1.9 [2.13]), Social-Concerns Concentration scale (from 2.9 [SD = 2.10] to 0.80 [SD = 1.14]), and Worry/Oversensitivity scale (from 5.4 [SD = 3.13] to 0.90 [SD = 1.20]) from pretest to posttest.

Clinical vignette: Omar

On the basis of child and parent interview data (i.e., ADIS-IV: C/P; Silverman & Albano, 1996; Silverman, Saavedra & Pina, 2001), a 10-year old Mexican-origin boy was found to meet criteria for SOP. The parents reported that the problem began when Omar was eight years old (in 3rd grade) when his classmates would call him names because of his intrinsic teeth discoloration. At that time the parents sought dental services for Omar but were unable to afford the costs. The interventionist asked the parents for permission to look into the possibility of low-cost or free dental care for Omar, and explained that even if the teeth discoloration problem was resolved, that Omar should still participate in the program because his SOP had escalated significantly over time. The parents agreed to have the interventionist research and suggest locations for low-cost/free dental care and to have Omar participate in the treatment program.

With regard to Omar's SOP, the child and his parents explained that the problem had escalated because he had begun to avoid talking to other children and adults

(and also avoided smiling) because of evaluative concerns. Omar described feeling "*vergüenza*" (shame) and also explained how he felt distress and irritability in social situations. Omar and his parents reported that as the concern about negative evaluation increased over time so did his avoidance of social situations. At first the avoidance of social situations did not present many difficulties, but as time progressed it became more difficult for him to make and maintain friends, engage in class participation, and translate conversations into Spanish for his parents (neither parent spoke English). This led to several areas of interference for Omar and his family, such as his refusal to attend extended family get-togethers or birthday parties, poor school performance, and conflicts within the family. When Omar was referred for *Acercamiento* CBT by his school teacher, the duration of his SOP was 2 years.

Omar was treated with *Acercamiento* CBT and the child and both his parents attended the sessions (two sessions were attended by one of his siblings). During treatment, Omar's father provided insight about his son's behavior problems in social situations outside the home. For example, Omar and his father often would go to the hardware store where the father sometimes would ask the him to translate questions for the sales clerk but because of his SOP Omar would sometimes refuse to help his father and/or would show excessive distress (he would bite his nails, rock back-and-forth, pull on his hair). Omar also reported that he felt guilty and sad because his father was upset that he was unable to communicate with other adults for him. The mother also provided information about the child's SOP with examples from situations that would often take place at home. For example, Omar's two siblings would tease him using names the other kids would call him at school because of his teeth. These sibling interactions caused Omar distress and he would often respond by crying or becoming physically aggressive.

Omar's treatment focused largely on weekly exposures (e.g., asking a store employee a question for his father). To facilitate the completion of exposures, Omar's parents were trained to administer praise contingent on the child's successful completion of each gradual exposure from his fear hierarchy. For example, the first exposure was conducted in-session and the interventionist modeled for the parents the administration of contingent praise. The child and his parents worked together to derive a "Rewards Menu," which included social and affective rewards to be administered to the child, contingent on the successful completion of exposures. The mother suggested using signs of affection and spending time alone with the child as rewards while the father volunteered to play outside with the child. By mid-treatment (Session 5), the child had successfully completed five exposures and his subjective ratings of distress had decreased to 1 or 0 on the feelings thermometer (Silverman & Albano, 1996) by the end of the exposures.

The remainder of the treatment involved cognitive training and continual use of exposures. Cognitive training involved teaching the child to use a three-step exercise. First, Omar was instructed to: (1) use "Stop/Alto" as a keyword or self-talk to signal engagement in the next two steps of the exercise, which entailed

(2) identifying his anxious thoughts or anxious self-talk and (3) finding alternative thoughts or solutions (coping plans). Omar had indicated at mid-treatment that his most anxiety-provoking situation (a 7 using a 0 to 8 scale) would be to have a conversation with a "fancy dressed" man (which the child detailed as a man in dress pants and a long sleeve shirt). Omar explained that "fancy dressed" men were judgmental and this made him afraid of talking to them or being approached by them. After completing the 3-step exercise (in-session with minimal help from his parents), Omar reported his subjective rating of distress as a 5 (on the 0 to 8 scale). Completion of the 3-step exercise was followed by an in-vivo exposure that entailed having a conversation with a "fancy dressed" man (a program staff facilitated the exposure which took place outside the clinic). The combination of the 3-step cognitive exercise plus the exposures was used for the remainder of the treatment (and was prescribed for use thereafter).

Toward the end of treatment, Omar reported some anxiety and distress because the other kids were now calling him names (i.e., racial insults about the brown color of his skin). His parents reported the incidents to the teacher and school administrators and the interventionist encouraged the child to use the 3-step cognitive exercise. After a week, Omar reported that the 3-step exercise had been useful for coping with other situations that arose. Relapse prevention was presented at the end of treatment.

At the posttreatment assessment, the ADIS-IV: C/P was re-administered to Omar and his parents by an independent diagnostician and the child no longer met diagnostic criteria for SOP. Although his mother reported that Omar might still be apprehensive about "starting or joining in on a conversation," both Omar and his parents reported improved functioning. He now had two new friends at school and his mother reported that he was enjoying school more and was able to help the family by translating conversations into Spanish for the parents at the supermarket, hardware store, and gas stations.

Conclusions and future directions

Although there is scarcity of research showing how Latino youth with anxiety disorders respond to psychosocial treatments, the work that has been conducted (coupled with the preliminary findings reported in this article) suggests that exposure-based CBT is a promising treatment for anxiety disorders in Latino youth. These data certainly need to be replicated and expanded to examine the efficacy of CBT with diverse Latino youth. For example, it is important to demonstrate the efficacy of CBT by means of a randomized clinical trial that uses an attention-control condition or a treatment-as-usual condition. It also is important to refine this initial cultural adaptation of CBT by means of a randomized clinical trial that evaluates moderators of treatment response such as acculturation and/or enculturation. Another avenue for future research is to examine potential cultural mediators of child treatment response. For example, it might be the case that when the child's anxiety is related to high levels of perceived *Familismo* obligations,

changes in this domain produce anxiety symptom reductions (Ginsburg & Becker, this issue, offer additional examples). This knowledge can help pave the way for developing culture-specific modules and identifying culture-specific mechanisms of child behavior change in anxiety disorder psychotherapy research with Latino youth. As these data accumulate, cost-benefit analyses and effectiveness trial studies can further help secure evidence-based treatments for anxious Latino youth and thereby improve the lives of these youth and their families.

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