Culturally Adapting Parent Training for Latino Youth With ADHD: Development and Pilot

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Focus group data from Latino parents, research examining Latino cultural values, and recommendations from mental health providers working with Latino families were used to culturally adapt, an evidence-based parent training program for Latino youth with attention-deficit/hyperactivity disorder (ADHD). Session-specific, cultural adaptations were made to 5 sessions, and 2 sessions were completely replaced with newly developed, more culturally congruent sessions. The adapted treatment also resulted in global adaptations to all treatment sessions, cultural adaptations to the assessment and feedback phase, as well as adaptations targeting practical barriers to treatment. Initial treatment outcomes from a small pilot demonstrated that 100% of families successfully completed the culturally adapted parent training program and reported being very satisfied with treatment. Eighty percent of children demonstrated reliable improvement in parent-reported ADHD symptomatology, and 40% of parents reported reliable improvement in both parental and family functioning.

Keywords: culturally adapted treatment, Latinos, ADHD, parent training

Attention-deficit/hyperactivity disorder (ADHD), one of the most common mental health disorders in childhood, is characterized by developmentally inappropriate levels of hyperactivity, impulsivity, and inattention and is associated with academic, social, and family difficulties that continue into adulthood (American Psychiatric Association, 2013; Biederman et al., 2012). Although effective psychosocial treatments for ADHD have been well-established with European American families (Hoza, Kaiser, & Hurt, 2008), there is a lack of support for their effectiveness with ethnic minority families (Miranda et al., 2005). This is concerning as Latino youth are estimated to have similar or higher rates of mental health problems relative to their European American counterparts (U.S. Department of Health & Human Services, 2001). Research also suggests that Latino children often do not receive mental health services (Flores & The Committee on Pediatric Research, 2010), which places them at greater risk for developing more serious behavioral problems (e.g., aggression and criminal activity) and perpetuates mental health disparities in Latino adults.

This two-part study aimed to contribute to our knowledge about effective psychosocial treatments for ethnic minority families by determining the feasibility of culturally adapting an evidence-based ADHD treatment for Latino families and providing initial pilot data demonstrating the effectiveness of the culturally adapted intervention. Specifically, our first aim was to determine how focus group data from Latino parents and recommendations from mental health providers working with Latino families could be used in conjunction with research.
examining Latino cultural values to adapt existing ADHD parent training sessions to make them more culturally appropriate. Our second aim was to pilot the new intervention with a small sample of Latino families to examine treatment retention and satisfaction, as well as reliable change in child, parental, and family functioning following treatment.

**ADHD and Evidence-Based Treatment**

ADHD is one of the most commonly diagnosed mental health disorders in children, affecting approximately 5% of youth. In addition to long-standing hyperactive, impulsive, and inattentive symptoms that are not appropriate for the child’s age, ADHD also results in functional problems at home, school, and/or with peers (American Psychiatric Association, 2013; DuPaul, McGoey, Eckert, & VanBrakle, 2001; Smith, Barkley, & Shapiro, 2006). The long-term, developmental trajectory of ADHD suggests that these children continue to experience debilitating symptoms, as well as significant academic, social, and family difficulties into adulthood (Biederman et al., 2012).

Two psychosocial treatments for ADHD are supported by research: behavioral parent training (BPT) and behavioral classroom interventions (Hoza et al., 2008). BPT typically consists of approximately eight sessions that include psychoeducation about ADHD and behavioral principles, as well as the development of specific parenting strategies or skills. Sessions are skill-based and cover topics, such as giving effective instructions, consistently using time out, attending to and praising positive behavior, ignoring mildly negative behavior, establishing a token economy or response cost system, and establishing a classroom intervention focused on functional problems in the classroom (Anastopoulos & Farley, 2003; Barkley, 1998).

Although positive treatment outcomes with regard to both child behavior and parental functioning have been found when examining predominantly European American samples (e.g., Bor, Sanders, & Markie-Dadds, 2002; Gerdes, Haack, & Schneider, 2012), Latino families, especially less acculturated families, have not been well represented in treatment outcome studies examining BPT for ADHD (Miranda et al., 2005). In fact, the Multimodal Treatment Study of Children with ADHD (MTA) is the only study that has directly examined the effects of ethnicity on treatment outcomes in children with ADHD. Although Latino families had similar treatment outcomes as European American families after controlling for socioeconomic factors (Arnold et al., 2003), the Latino families who participated in the MTA likely are not representative of all Latino families in the United States. To participate, they had to be fluent in English and agree to be assigned to any one of four treatment conditions, including medication only. Research indicates that many Latino parents do not consider medication an acceptable or preferred treatment option (Arcia, Fernandez, & Jaquez, 2004), suggesting that the Latino families in the MTA study may have been more acculturated to Western values than other Latino families in the United States. Research examining important Latino cultural values, discussed in more detail later, suggests that some BPT sessions may not be culturally appropriate for some Latino families, particularly less acculturated families.

**Latino Mental Health Disparities and Culturally-Adapted Interventions**

Empirical examination of effective treatment for Latinos is needed, as they make up the largest and fastest growing ethnic minority group in the United States, with estimates indicating that by the middle of this century nearly 40% of the children in our country will be Latino (U.S. Census Bureau, 2008). Current research suggests that Latino children exhibit similar or higher rates of mental health problems than do European American children (U.S. Department of Health & Human Services, 2001). In addition, Latino youth often do not receive mental health services; when they do, their families are more likely to terminate treatment prematurely (Flores & The Committee on Pediatric Research, 2010; Nock & Ferriter, 2005). Given the developmental trajectory of ADHD (Biederman et al., 2012), this unmet need puts Latino youth with ADHD at risk for continued difficulties in adulthood and contributes to continued mental health disparities.

Recognizing the need for effective treatments with diverse populations, there is a growing body of literature on the cultural adaptation of evidence-based mental health interventions, and several guidelines have been proposed. For ex-
ample, Bernal, Bonilla, and Bellido (1995) first proposed the ecological validity framework (EVF), which consists of eight dimensions of mental health interventions that may need to be adapted in order to develop a treatment that is culturally sensitive. These dimensions include language, persons, metaphors, content, concepts, goals, methods, and context. Domenech Rodríguez and Weiling (2004) expanded the EVF to include additional aspects of mental health interventions and organized the cultural adaptation process into three general phases. According to cultural adaptation process model (CAPM), the initial phase focuses on developing collaborations between the cultural adaptation specialist and the program developer and assessing the needs of the target community. Subsequent phases include evaluating the cultural appropriateness of the intervention, making initial adaptations, testing adaptations and gathering feedback, and evaluating adaptations. Although both EVF and CAPM have enabled researchers to adapt existing evidence-based treatments, future research is needed to test these and other models empirically (Bernal, Jiménez, & Domenech Rodríguez, 2009).

Despite the existence of these adaptation models, Latinos and other ethnic minority children have not been well represented in treatment outcome studies examining parent training for ADHD or other externalizing disorders (Miranda et al., 2005). The few existing treatment studies involving ethnic minority youth primarily have compared ethnic minority children to European American children in order to determine if groups differed with regard to their response to standard evidence-based treatment or have used ethnic-minority-only samples to examine the effects of a culturally adapted treatment (Miranda et al., 2005). It is important to note that results of studies examining culturally adapted parent training programs for Latino families have been promising. Specifically, Pantin and colleagues’ (2003) culturally adapted parent management program for families of Latino adolescents with antisocial behavior revealed that the intervention improved parental investment and resulted in a reduction of antisocial behavior compared to pretreatment measures. Similarly, initial data from Domenech Rodríguez, Baumann, and Schwartz (2011)’s randomized clinical trial (RCT) of a culturally adapted version of the Parent Management Training-Oregon program, an evidence-based parent training program for parents of youth with behavior problems, are positive with regards to parental retention and requests for the adapted treatment following the conclusion of the RCT.

McCabe and Yeh (2009) also found that both standard Parent Child Interaction Therapy (PCIT) and a cultural adaptation of PCIT for Mexican American preschoolers with conduct problems were better than treatment as usual when examining attrition and satisfaction with treatment, as well as parental reports of externalizing behaviors, parenting stress, and observations of parent–child interactions. Although outcome differences between the two treatments did not reach statistical significance (likely due to the small sample size), examination of effect sizes suggested that the culturally adapted treatment resulted in the largest effects for almost every outcome measure.

Other than McCabe and Yeh’s (2009) study examining preschoolers with conduct problems, no research has directly compared a culturally adapted intervention to a standard intervention to determine if adapted treatments actually outperform standard treatments for ethnic minority populations. This lack of research, along with documented mental health disparities and evidence that ethnic minority families are more likely to prematurely drop out of treatment than European American families has prompted researchers to emphasize the need for culturally sensitive mental health interventions for ethnic minority children and their families (Sue, Zane, Nagayama Hall, & Berger, 2009). Some also have argued that culturally adapted interventions may be necessary to increase both retention and engagement in psychosocial interventions (Kumpfer, Alvarado, Smith, & Bellamy, 2002), as no intervention can be effective if families do not remain in treatment.

Cultural Factors

Research examining Latino cultural values points to several areas that may be important to consider when deciding on possible cultural adaptations to treatment. Given the diversity within the Latino population, it is important to avoid making broad generalizations about beliefs and practices; however, there are several cultural values that are commonly observed.
across Latino subgroups and are relevant to working with Latino families in treatment, including *respeto*, *personalismo*, *familismo*, and gender socialization (Barker, Cook, & Borrego, 2010). *Respeto* refers to demonstrating respect for authority figures and elders, as well as maintaining respect and empathy in interpersonal relationships (Andrés-Hyman, Ortiz, Añez, Paris, & Davidson, 2006). Similarly, *personalismo* refers to maintaining trust and warmth in interpersonal relationships (Altarriba & Santiago-Rivera, 1994). Both of these cultural values are relevant to treatment with Latino families, as they are thought to influence the therapeutic relationship, which may impact parental engagement in treatment (Barker et al., 2010). *Familismo* or *familism* refers to the deep sense of loyalty and reliance on extended family networks (Forehand & Kotchick, 1996). This is another important cultural value to consider in treatment, as research has shown that higher levels of familism are associated with more consistent discipline techniques and parental monitoring within Latino families (Romero & Ruiz, 2007). It also may influence which family members are involved in parenting and discipline in the home (Barker et al., 2010).

Gender socialization also is an important cultural value to consider in the cultural adaptation process. Contrary to many Western countries, support and respect for traditional gender roles are commonly found in Latino families. Consistent with this, mothers are traditionally perceived as the nurturers, whereas fathers are perceived as the providers of the family (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002). Further, Latino culture emphasizes machismo; fathers make major family decisions (Andrés-Hyman et al., 2006), which highlights the potential need for engaging fathers in the treatment process and ensuring that they are supportive of their wives participating in treatment (McCabe, Yeh, Garland, Lau, & Chavez, 2005). Research also suggests that Latino parents tend to have an authoritarian parenting style with high levels of behavioral control and monitoring. Compared to their European American counterparts, Latino parents place stronger emphasis on self-control and obedience and are less likely to praise their children. They also highly value the development of strong interpersonal and social skills and respect for elders in their children. As a result, they may use power assertive parent- ing, as well as shame if they perceive their children as behaving contrary to these values (as cited in Domenech Rodríguez, Davis, Rodríguez, & Bates, 2006; Santiago-Rivera et al., 2002).

**Current Study**

Given current mental health disparities, lack of empirical evidence for effective psychosocial ADHD treatments for Latino families, and recommendations that cultural adaptations may be necessary to keep many Latino families in engaged in treatment, the first goal of this two-part study was to determine the feasibility of culturally adapting an evidence-based ADHD treatment for Latino youth. Specifically, we aimed to form a diverse team of Latino parents, as well as mental health professionals and researchers with expertise in working with Latino families and ADHD. The goal of this team was to employ a culturally sensitive, grassroots approach by using current cultural literature, recommendations from mental health providers working with Latino families, and Latino parent focus group data to make cultural and practical barriers adaptations to evidence-based parent training sessions for childhood ADHD. The target group for these adaptations was less acculturated, low income Latino families, as they are most likely in need of adapted mental health interventions. Thus, both culture and socioeconomic status (SES) were a focus of adaptations.

The second goal was to pilot the culturally adapted intervention with a small sample of Latino families to establish initial treatment outcome data. It was predicted that families would successfully complete and report being satisfied with the new treatment program. The program also was expected to result in reliable change in child (ADHD symptomatology and functional impairment), parental (parenting stress), and family functioning (chaos in the home).

**Method: Part 1 (Development)**

**Participants**

Participants in the development phase of the study included 21 Latino parents residing in a culturally diverse city in the upper Midwest. To be included in the study, parents needed to identify as Latino, speak fluent Spanish, and have at least one
school-aged child. The mean age of parents was 39.00 years (SD = 11.05). The sample had slightly more females (67%) than males, was predominantly of Mexican descent (86%), and mostly consisted of parents who had lived in the United States for more than 10 years (71%). Approximately half of the parents had a high school education or less (57%), and most had an annual family income of less than $40,001 (76%). These demographic characteristics are consistent with the Latino families targeted by the authors for the adapted treatment.

Procedure

Given the large percentage of Latinos in the United States who identify as being Catholic (Espinosa, Elizondo, & Miranda, 2003), parents were recruited from local Catholic churches. The pastor and church personnel identified parents who met the inclusion criteria and told them about the study face-to-face. Interested parents were provided with the research teams’ contact information and were instructed to contact us directly if they wanted more information about the study. Two sets of groups were conducted, each with approximately 10 parents. Each set consisted of a series of four sessions lasting approximately two hours each. Although participation in all four sessions was not required, most parents came every week and none dropped out completely. Thus, the composition of the two sets of groups was generally the same from week to week.

Two members of the first author’s research team (also coauthors on this manuscript) lead the focus groups. Both individuals are proficient in spoken and written Spanish, as groups were conducted and transcribed in Spanish, and both had prior research experience with Latino families. All groups occurred at the churches at a time agreed upon by the parents. Parents were compensated $25 per group, and dinner and childcare were provided. This part of the study was conducted in compliance with the university’s institutional review board, and written informed consent was obtained from all parents prior to the first group.

Measures

Demographic form. The demographic form was used to gather basic demographic information about the parent, including age, gender, ethnicity, marital status, family income, country of origin, time in the United States, and language competency.

Focus Groups

The aim of the focus groups was to gather information on parental reactions to standard parent training sessions, to determine necessary cultural adaptations to treatment sessions, and to gauge beliefs related to marketing, recruiting, and delivering parent training to Latino families. A series of four groups were conducted with each session building upon the previous one and focusing on a major theme; this is described in more detail below. All groups were conducted in Spanish and recorded for coding purposes. At the beginning of the first group, parents were told that the goal of the groups was to discuss how to change an existing treatment to make it more appealing and effective for Latino families.

The first group aimed to gauge parental beliefs about the etiology of and appropriate treatment for ADHD and parental expectations about barriers to receiving treatment for ADHD. Given our previous work with Latino families, we wanted to avoid using mental health labels, which may not be familiar to many of the parents. Thus, rather than using ADHD terminology, the first focus group began with parents viewing nine video clips of a Latino boy displaying symptoms and functional problems consistent with ADHD, across three settings (home, school, and with peers). Following the clips, parents were asked a series of questions, such as “What do you think is the cause of this child’s problems?” and “What challenges do you think you would face when seeking help if this was your child?”

The second group focused on parental beliefs related to marketing and delivering parent training and parental responses to the idea of parent training. Prior to asking parents more specific questions related to this, group leaders provided a brief overview of parent training and gave parents a copy of the brochure that is provided to parents when they contact the clinic. Examples of questions included “If this was your child, do you think parent training would be helpful?” and “What would help you buy into parent training?”

The third and fourth groups aimed to gauge parental reactions to specific parent training ses-
sions. The group leaders began these groups by providing an overview of each session one at a time, showing a video clip from that session, and distributing relevant session handouts. The parent training sessions presented were based on Barkley’s (1997) manual and included establishing a school intervention, giving effective instructions, employing time out, using positive reinforcement, developing a token economy for homework hour and routines, and discussing planning ahead strategies. Following each session review and video, group leaders asked parents questions, such as “How would you feel about learning this skill?” and “What would make it more appealing or effective for Latino families?”

Results/Discussion: Part 1 (Development)

To summarize the major themes that emerged from these groups, the first author’s research team transcribed each group, carefully read each transcription, and made a list of major themes that emerged. Once an exhaustive list of themes was created, transcriptions of each group were then coded based on this list by two individuals. After coding was completed, the team reviewed each transcription, discussed and resolved any coding disagreements, and determined a final code. Percentage agreements between each coder and the final code were computed and averaged; both coders had an average percentage agreement of 87 with the final codes.

A Parent Training Adaptation Team (PTAT) composed of ADHD and multicultural researchers (including the first author’s research team who has more than 5 years of experience conducting research with Latino families), Latino parents, and a community mental health professional then met weekly over 12 weeks for approximately 2 hr each week. The team used the coded focus group data in conjunction with recommendations from mental health providers working with Latino families and previous research to make adaptations to each parent training session, as well as to the overall intervention.

Adaptations are summarized below and are organized by (a) general treatment adaptations, which include global adaptations, cultural adaptations, and practical barriers adaptations, (b) class (session)-specific cultural adaptations, and (c) new culturally congruent classes (sessions). Cultural adaptations are defined as any adaptation that focused on integrating important cultural values into the intervention. Adaptations related to practical barriers are defined as any adaptation that focused on helping families overcome common barriers to receiving mental health treatment. Some of these adaptations are specific to Latino families; however, others are related to financial struggles and likely are applicable to any low income family. Finally, global adaptations are defined as any adaptation that resulted from a general theme or recommendation, but were not specifically tied to culture or SES.

General Treatment Adaptations

Global adaptations. PTAT discussion, focus group data, and recommendations from mental health providers indicated that more skill practice and simpler take-home materials with fewer words and inclusion of pictorial illustrations would be necessary to keep parents engaged and committed to treatment. Thus, several global adaptations were made to all sessions (see Table 1). These include more role plays demonstrating the parenting skill being taught, coaching of the parents practicing the

<table>
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<th>Table 1 General Treatment Adaptations</th>
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<tr>
<td><strong>Global Adapations—Treatment</strong></td>
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<tr>
<td>Include more role plays demonstrating the parenting skill being taught</td>
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<td>Actively coach parents practicing the skill in session</td>
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<td>Use simplified handouts with more concrete examples of the skill and comic strips portraying the skill</td>
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<tr>
<td>Provide parents with video demonstrations of the skill to view at home</td>
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<tr>
<td><strong>Cultural Adapations—Assessment and Feedback</strong></td>
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<tr>
<td>Use different terminology when asking about the presenting “problem”</td>
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<tr>
<td>Set the parental expectation that change takes time</td>
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<tr>
<td>Provide relevant rationales for the importance of homework completion</td>
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<tr>
<td>Involve the extended family whenever applicable and possible</td>
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<td><strong>Practical Barriers Adaptations</strong></td>
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<tr>
<td>Frame as educational rather than therapy (“eight class program”)</td>
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<tr>
<td>Emphasize that the goal is to make the family more successful</td>
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<tr>
<td>Hold classes in the evening in the community</td>
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<tr>
<td>Provide classes free of charge and provide dinner and childcare if possible</td>
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<td>Conduct classes in Spanish by bilingual individuals</td>
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skill in session, simplified handouts with more concrete examples of the skill and comic strips portraying the skill, and video demonstrations of the skill sent home with parents.

**Cultural adaptations.** Given research demonstrating that Latino children are less likely to receive mental health treatment and more likely to prematurely dropout of treatment (Flores & The Committee on Pediatric Research, 2010; Nock & Ferriter, 2005), several cultural adaptations that are most salient in the assessment and feedback phase also were made (see Table 1). PTAT discussion suggested that during the assessment, parents should be asked to identify any “concerns” or “challenges” related to their child’s behavior, rather than to identify “problems,” as the latter may be perceived as more stigmatizing to many Latino parents. Similarly, PTAT discussion suggested that providing parents with the expectation that change takes time and providing a relevant rationale for the importance of homework completion may increase Latino parental engagement in treatment and decrease early termination from treatment. Both of these points were added to the feedback session and were revisited throughout treatment. Finally, research suggests the importance of involving the extended family when working with Latino families (McCabe et al., 2005), which also was added to the feedback session.

**Practical barriers adaptations.** In order to address practical barriers that many Latino families face when pursuing treatment (i.e., stigma associated with seeking mental services, poverty and lack of health insurance, transportation and scheduling difficulties, and language differences; Kouyoumdjian, Zamboanga, & Hansen, 2003), several additional adaptations were made (see Table 1). The adapted treatment is framed as educational (i.e., it is described as an “eight class program,” rather than eight sessions of treatment) and emphasizes “making the family more successful,” rather than training parents. Thus, “program” rather than “treatment” and “class” rather than “session” will be used from this point forward when discussing the adaptations. In addition, classes are free and held in the evening at the neighborhood community center with dinner and childcare provided. Finally, all classes are conducted in Spanish by bilingual individuals, and all take-home materials are in Spanish.

**Class (Session) Specific Cultural Adaptations**

In addition to these general adaptations, class-specific cultural adaptations were made to five classes based on PTAT discussions employing focus group data, recommendations from mental health providers, and research related to Latino cultural values. It was determined that while the overall content and goal of each of these classes should remain unchanged, several important cultural adaptations would make the classes more relevant to Latino families. These adaptations are described below and summarized in Table 2.

**Daily report card (DRC).** The DRC is a simple classroom intervention, which involves the teacher tracking three to five problematic behaviors in the classroom on a daily basis; the DRC is given to the child at the end of the school day, and the parent provides a different

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<th>Table 2</th>
<th>Class-Specific Cultural Adaptations</th>
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<tr>
<td></td>
<td><strong>Daily Report Card (DRC)</strong></td>
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<tr>
<td></td>
<td>Increase parental involvement with school at outset of program</td>
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<tr>
<td></td>
<td>Provide culturally congruent rationale for DRC</td>
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<tr>
<td></td>
<td>Openly discuss and troubleshoot parental concerns about rewarding expected behavior</td>
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<td></td>
<td>Emphasize importance of parents rewarding even small improvements</td>
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<td></td>
<td><strong>Effective Instructions</strong></td>
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<tr>
<td></td>
<td>Openly address how traditional gender roles may be inconsistent with both parents using this tool</td>
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<td></td>
<td>Encourage open dialogue about any parental concerns</td>
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<td></td>
<td>Use more culturally-congruent example for typical sequence of noncompliance</td>
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<td></td>
<td><strong>Positive and Negative Attention</strong></td>
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<tr>
<td></td>
<td>Openly revisit conversations related to positive attention and traditional gender roles</td>
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<td></td>
<td>Provide more culturally-congruent rationale for positive attention</td>
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<td></td>
<td><strong>Taking Over the DRC</strong></td>
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<tr>
<td></td>
<td>Increase parental involvement with school at outset of program</td>
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<tr>
<td></td>
<td>Simplify “take-over process” and make it more collaborative with teacher</td>
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<td></td>
<td>Ensure that current teacher is on board for assisting with development of new DRC next year</td>
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<td></td>
<td><strong>Final Tips for Success</strong></td>
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<td></td>
<td>Include final tips for success</td>
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level of reward at home depending on how many DRC goals his or her child met. The focus of the DRC class is to provide an explanation of the DRC to parents and to work with them to develop a home-based reward menu for the DRC. Establishing and effectively maintaining a DRC requires the mental health provider to meet weekly with the teacher, with the expectation that the parent will take over these weekly meetings when treatment has ended.

PTAT discussion suggested that many Latino parents, especially those with limited English, may not feel comfortable taking over the DRC after the parent groups have ended unless more attention is focused on increasing their communication and comfort level with the school and teacher. Thus, one adaptation involves increasing parental involvement with the school and teacher at the outset of the program by arranging for at least one parent to attend every teacher meeting with one of the co-leaders for the duration of the program.

PTAT discussion also suggested that providing a rationale for the DRC that focused on empowering parents and improving family communication would likely increase parental motivation in trying this new strategy; such a rationale was added. Further, co-leaders also are instructed to openly discuss and troubleshoot how providing a reward for engaging in expected behavior at school may be difficult for some Latino parents. This was added based on research suggesting that as a group, Latino parents are more likely to embrace an authoritarian parenting style with a strong emphasis on respect and obedience and are less likely to praise and provide rewards for expected behaviors (as cited in Domenech Rodriguez et al., 2006; Santiago-Rivera et al., 2002). Finally, given research suggesting that Latino parents may use shame to bring about behavior change (Santiago-Rivera et al., 2002), an emphasis on rewarding even small improvements (e.g., one yes on the DRC) also was added.

Effective instructions. The purpose of the effective instructions class, which is to present the cycle of noncompliance and to demonstrate that parents can increase child compliance by giving more effective instructions, also remains intact with several cultural adaptations added. Research regarding traditional, Latino gender roles (Santiago-Rivera et al., 2002) suggests that they may be inconsistent with both parents administering consequences for noncompliance. A discussion about how adherence to traditional gender roles may result in some Latino mothers deferring to their husbands rather than implementing an immediate consequence for repeated noncompliance was added. Related to this, co-leaders also are reminded to encourage parents to express and discuss any concerns that they may have about the material being presented, as research suggests that many Latino parents may not challenge authority (the co-leaders in this case) out of respect (McCabe et al., 2005). Finally, based on PTAT discussion, the example used to illustrate the typical sequence of noncompliance was adapted to better reflect the typical outcome in Latino families (i.e., the mother completing the task herself).

Positive and negative attention. The goal of this class is to discuss positive and negative attention and how using positive attention and removing negative attention can bring about behavioral change in children. While maintaining this goal, cultural adaptations include openly revisiting previous conversations related to parental concerns about the use of positive attention and praise that may be inconsistent with an authoritarian parenting style and to the potential of traditional gender roles preventing one parent from actively using positive attention. A more culturally congruent rationale for the skill focused on setting the child up for success and decreasing confusion that the child may feel if he or she is receiving a lot of positive attention at school but none at home also was added.

Taking over the DRC. This class focuses on providing parents step-by-step instructions for how to take over the DRC to ensure that the intervention continues after the parent groups have ended and how to establish a new DRC in future years. As mentioned previously, a significant adaptation to the DRC classes involves increasing parental involvement in all teacher meetings over the duration of the program. PTAT discussion also resulted in two additional adaptations. The “take-over” process has been simplified by eliminating the need for parents to maintain graphs of each target and by making the DRC more of a collaborative effort between the parent and teacher. This way the parent does not feel like he or she is solely responsible for decisions related to when to make changes to the DRC criteria and targets. With regards to
establishing a new DRC the following year, ensuring that the current teacher is on board with attending the first meeting between the new teacher and the parent in the fall and removing the need for baseline tracking was added.

**Final tips for success.** The closing class has been renamed final tips for success to better illustrate an additional focus of this class. In addition to reviewing each family’s goals for the program and going over a handout summarizing each class, a final tips for success section was added and includes strategies, such as using when-then statements, setting expectations, and using distraction. PTAT discussion suggested that instilling hope and providing families with a few new concrete parenting “tools” would help to ensure that Latino parents continued using the skills learned in the program.

**New Culturally Congruent Classes (Sessions)**

Finally, PTAT discussion based on focus group data, recommendations from mental health provider, and relevant research resulted in the replacement of time out and token economy with two newly developed classes targeting the same problem areas, but with different approaches believed to be more culturally congruent. These classes are described below and summarized in Table 3.

**Consistent consequences.** PTAT discussion and research on cultural differences in parenting (as summarized in Santiago-Rivera et al., 2002) suggested that time out, a mainstay in evidence-based parent training, would not be well-received by many Latino parents. Concerns centered around two primary issues: parental perceptions that time out is not a severe enough of a consequence for repeated noncompliance (a sign of disrespect) and parental beliefs that placing one’s child in isolation from the rest of the family seems odd and inconsistent with familismo, an important Latino value. Thus, a class focused on using consistent consequences in the form of natural consequences and removal of privileges and possessions in response to repeated noncompliance and physical aggression was developed.

The goal of this class is to introduce the idea of using natural consequences and removal of privileges and possessions as a way to help children learn how to behave better, be better listeners, and get along better with others. Both strategies are defined, discussed, and role-played. Parents are encouraged to use natural consequences whenever applicable, which include taking a toy away for a period of time after a child throws it out of anger or sending a child to school in his or her pajamas (with clothes in a backpack) if he or she refuses to get dressed in the morning. When natural consequences are not possible, parents are encouraged to remove privileges or possessions, such as imposing an earlier bedtime or taking away electronics or a special toy for a period of time. PTAT discussion also suggested that this class should be followed up with a home visit to allow for additional practice of the skill and to further incorporate familismo and personalism into the program, important constructs to many Latino families (Santiago-Rivera et al., 2002).

**Managing routines.** PTAT discussion suggested that establishing and implementing a token economy or chip system also would not be well-received by many Latino parents. Two major concerns were raised: such a system would be too difficult to consistently implement in families with more than one or two children and cultural differences related to the amount of structure found in working-class or lower class, immigrant Latino homes versus middle-class,

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<th>Table 3</th>
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<tr>
<td>Consistent Consequences</td>
<td>Introduce natural consequences and removal of privileges and possessions</td>
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<td></td>
<td>Define, discuss, and role play</td>
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<tr>
<td></td>
<td>Follow-up class with home visit</td>
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<tr>
<td>Managing Routines—Homework</td>
<td>Determine each family’s situation and needs</td>
</tr>
<tr>
<td></td>
<td>Assist families in identifying and enrolling their child in a community-based program</td>
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<tr>
<td></td>
<td>Assist families in establishing a family routine around homework hour</td>
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<tr>
<td></td>
<td>Assist families in developing a simple reward plan</td>
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<tr>
<td></td>
<td>Follow-up class with home visit</td>
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<tr>
<td>Managing Routines—Checklists</td>
<td>Determine each family’s situation and needs</td>
</tr>
<tr>
<td></td>
<td>Assist families in developing checklists for morning and/or bedtime routines</td>
</tr>
<tr>
<td></td>
<td>Assist families in developing a simple reward plan</td>
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<tr>
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<td>Follow-up class with home visit</td>
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</table>
European American homes would make maintaining such a system unlikely for many families. Thus, two classes were developed to address how to manage routines—one centers around homework hour and the other focuses on morning and bedtime routines, as they are the most problematic times identified by parents of youth with ADHD.

The goal of the managing routines—homework class is to first determine each family’s situation and needs as they relate to homework issues. Much PTAT discussion focused on the relative lack of structure found in many of the targeted Latino homes, as well as the reality that some of these Latino parents may not be able to actively assist their child with homework for a variety of reasons, including language barriers and busy work schedules. Once individual situations and needs are better understood, the goal of this class is to either assist families in identifying and enrolling their child in a community-based program that includes tutoring and homework help or assist families in establishing a family routine around homework hour.

For families who choose to establish a homework hour routine, co-leaders assist them in determining a good time and location for homework and an adult or older sibling who is able to monitor homework hour. Families also are taught how to develop a homework plan with their child each day that involves assessing all homework assignments, breaking down the assignments into manageable chunks with planned breaks, and establishing and monitoring two goals for homework hour—complete it carefully and complete it with a positive attitude. If the child achieves these two goals, he or she can earn an activity of his or her choice, such as TV time. Similar to the consistent consequences class, a home visit follows this class to allow for further action to be taken toward finding an appropriate, community-based program or individualized help in developing a homework plan.

The goal of the managing routines—checklist class is to first determine each family’s situations and needs as they relate to morning and bedtime routines. Once it is determined if families need checklists for none, one, or both routines, co-leaders assist them in developing a checklist with a simple reward plan. Specifically, parents are asked to identify three to five items per routine, construct the actual checklist in class with materials provided, and identify a quick and easy reward that can be given immediately if the checklist is completed without issue (e.g., choosing the music on the way to school may be a good morning routine reward and staying up 15 min late may be a good bedtime routine reward). A home visit also follows this class.

Overview of the Culturally Adapted Treatment

In summary, the culturally adapted treatment consists of eight group parent training classes and an individualized DRC. The 2-hr classes are held weekly in the evening at a location in the Latino community (e.g., a church or community center) that is within walking distance (or a short bus ride) from the families that it is intended to serve. Classes include (1) DRC implementation, (2) effective instructions, (3) consistent consequences, (4) positive attention and ignoring, (5) managing routines - homework, (6) managing routines—checklists, (7) takeover of the DRC, and (8) final tips for success.

Method: Part 2 (Pilot)

Participants

Participants in the pilot phase of the study were recruited from the same Catholic churches that participated in the development phase; however, none of the families participated in both phases of the study. Flyers and verbal announcements during mass were used to advertise the study; parents contacted the research team directly if they were interested in participating. Participants included five Latino children with ADHD and at least one of their parents. Four of the children met DSM–IV–TR criteria for ADHD, predominantly inattentive type (I); one child meet criteria for ADHD, predominantly hyperactive/impulsive type (H/I). Three of the five children also were receiving individual therapy for mood issues; no other comorbidities were reported or diagnosed following the assessment. Children ranged in age from 5 to 12 years ($M = 9.20, SD = 2.77$) with a similar number of boys (3) and girls (2). All participating parents and children were of Mexican descent; with the exception of one parent who was born in the United States, all
parents reported immigrating to the United States at least 6 years ago. Although not specifically asked, most families living in the churches’ zip code earn $30,000 or less/year. Based on responses to the Acculturation Rating Scale for Mexican Americans-II (Cuellar et al., 1995), a measure of acculturation, parents reported high orientation to Mexican culture (Mexican Orientation subscale $M = 4.33$, $SD = .23$) and lower orientation to mainstream U.S. culture (Anglo Orientation subscale $M = 2.77$, $SD = .69$). These demographic characteristics are consistent with the Latino families targeted by the authors for the adapted treatment.

**Assessment and Treatment**

This part of the study was conducted in compliance with the university’s institutional review board, and written informed consent was obtained from all parents prior to the assessment. All children received a multimethod, multi-informant assessment, including parent, teacher, and child interviews and measures. Assessments were completed by two clinical psychology doctoral-level students working under the supervision of the first author, a licensed psychologist who specializes in ADHD; an experienced undergraduate research assistant assisted with the child portion of the assessments. All students are proficient in Spanish.

Parents participated in a semistructured clinical interview focused on the presenting problem and history, as well as the Spanish translation of the Disruptive Behavior Disorders (DBD) Structured Parent Interview, a diagnostic interview used to diagnose ADHD and common comorbid disorders (Pelham, 2002). Parents also completed the Spanish translations of the Parent/Teacher DBD Rating Scale (Gerdes, Lawton, Haack, & Hurtado, 2013; Pelham, Gnagy, Greenslade, & Milich, 1992) and ADHD FX-Scale (Haack, Gerdes, Lawton, & Schneider, 2014), which are described in more detail below. Children participated in an unstructured clinical interview and completed several self-report measures. Teachers completed the teacher versions of the same diagnostic measures as the parents, as well as participated in a brief teacher interview.

Consistent with recommendations from the American Academy of Pediatrics and previous research (Lahey et al., 2004), diagnostic decisions, including subtype classifications, were based on all sources of information gathered during the assessment, including clinical interviews, observations, and measures. Specifically, the clinical doctoral-level students and their licensed supervisor used all available data from the assessment to make a final clinical judgment on the DBD Structured Parent Interview for each DSM–IV–TR ADHD symptom.

Details of the culturally adapted treatment already have been discussed. Classes were held in the evening at the church from which families were recruited. Three members of the first author’s research team led the classes and completed the fidelity checks. Specifically, an advanced clinical doctoral-level student was the primary leader of all classes; an additional clinical doctoral-level student and an experienced undergraduate research assistant alternated weeks either serving as the co-leader or completing the fidelity check. Fidelity checks were completed live, which allowed the individual completing the check to alert the co-leaders immediately if an essential part of the class was missed. All students received training in the assessment and culturally adapted treatment by the first author, and two of the three served on the team who conducted the parent focus groups and developed the culturally adapted treatment.

**Treatment Outcome Measures**

**Treatment retention.** Retention was operationalized as family completion of the final planned session.

**Therapy Attitude Inventory (TAI; Eyberg, 1993).** The TAI is a 10-item parent-report measure assessing parental satisfaction with treatment. Parents rate each item on a 5-point scale, ranging from 1 (e.g., very dissatisfied) to 5 (e.g., very satisfied); a total score is computed, with higher scores indicating higher satisfaction. Good internal consistency (.88) and construct validity have been demonstrated for the English version (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993); psychometric data for the Spanish translation has not yet been established.

**Parent/Teacher Disruptive Behavior Disorders (DBD) Rating Scale (Pelham et al., 1992).** The DBD Rating Scale is a parent and teacher-report measure consisting of the DSM–IV–TR symptoms of ADHD, oppositional defi-
ant disorder, and conduct disorder. Symptoms are rated on a 4-point scale, ranging from 1 (not at all present) to 4 (very much present), with higher scores representing greater symptomatology. Although research demonstrates good internal consistency (.83–.91) and construct validity for the Spanish translation, the cultural validity of the Hyperactive/Impulsive subscale needs further examination (Gerdes et al., 2013). Completed teacher DBD Rating Scales were collected for all children as part of the comprehensive assessment; however, only parent DBD Rating Scales were successfully collected post-treatment because the school year ended as treatment was ending.

ADHD FX-Scale (Haack et al., 2014). The ADHD FX-Scale is a culturally sensitive, parent and teacher-report measure of ADHD functional impairment. It was developed specifically for use as an adjunct assessment and treatment outcome measure with Latino families given concerns related to the cultural validity of more traditional measures focused solely on symptomatology (Haack et al., 2014). Functional problems are rated on a 4-point scale, ranging from “no effect” to “a lot of effect,” with higher scores representing greater functional impairment. Sound psychometrics, including good internal consistency (.88 –.92), construct validity, and cultural validity have been established (Haack & Gerdes, 2014). For the same reason stated above, only parent ADHD FX-Scales were successfully collected post-treatment.

Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995). The PSI-SF, a parent-report measure of parenting stress, consists of 36 items rated on a 5-point scale, ranging from 1 (strongly agree) to 5 (strongly disagree); higher scores are indicative of higher parenting stress. Solis and Abidin (1991) examined the psychometrics of the Spanish translation of the full PSI and found good internal consistency (.88–.94) and good discriminant validity with a Latino sample.

Confusion, Hubbub, and Order Scale (CHAOS; Matheny, Wachs, Ludwig, & Phillips, 1995). The CHAOS, a parent-report measure of environmental chaos in the home, consists of 15 items rated on a 6-point scale, ranging from 1 (strongly agree) to 6 (strongly disagree); higher scores are indicative of more chaos in the home. Research demonstrates good internal consistency (.79), construct validity, and cultural validity for the Spanish translation (Haack, Gerdes, Schneider, & Hurtado, 2011).

Results/Discussion: Part 2 (Pilot)

Examination of treatment retention and satisfaction showed that 100% of families successfully completed the culturally adapted parent training program and reported being very satisfied with treatment on the TAI (M = 47.80, SD = 1.30). Reliable change in parent-reported ADHD symptomology, functional impairment, parenting stress, and chaos in the home also was examined. This is consistent with Karpenko, Owens, Evangelista, and Dodd’s (2009) argument for the benefit of examining all clients who achieve reliable change following treatment, even if the change does not meet Jacobson and Truax’s (1991) criteria for clinically significant change, which requires both reliable change and movement into the normal range of functioning.

Using the specific formulas outlined in Jacobson and Truax (1991), reliable change indices were calculated by determining individual change scores (i.e., the difference between an individual’s pre- and posttest scores) and dividing by the standard error of difference, a value that is computed using the standard error of measurement. Reliable change indices provide researchers with specific standards for assessing real or reliable change, as opposed to change that may be due to inaccurate measurement (Jacobson & Truax, 1991). Specifically, reliable change indices that were found to be greater than 1.96 (two-tailed) were considered to reflect reliable change. Parent-reported pre- and post-treatment outcomes for each child, along with child age and gender, are reported in Table 4. Families who demonstrated improvement with reliable change (i.e., reliable improvement) are marked with an asterisk next to the corresponding outcome measure. As can be seen in Table 4, 80% of children demonstrated reliable improvement in ADHD symptomology (40% for inattentive symptoms and 40% for hyperactive/impulsive symptoms), and 40% of parents reported reliable improvement with regards to both parenting stress and chaos in the home.
Summary and Future Directions

To combat the mental health disparities that exist for Latino youth in the United States (Flores & The Committee on Pediatric Research, 2010), our first goal of this two-part study was to determine the feasibility of culturally adapting an evidence-based ADHD treatment for Latino families. Focus group data from Latino parents, research examining Latino cultural values, and recommendations from mental health providers working with Latino families were used to adapt or develop eight parent training classes focused on treating ADHD in Latino families. Global adaptations made to all classes include more role plays demonstrating the parenting skill being taught, coaching of the parents practicing the skill in session, simplified handouts with more concrete examples of the skill and comic strips portraying the skill, and video demonstrations of the skill sent home with parents. Additional, cultural adaptations most salient in the assessment and feedback phase include using different terminology when asking about the presenting problem, providing parents with the expectation that change takes time, integrating relevant rationales for the importance of homework completion, and involving the extended family in treatment. Additional adaptations targeting practical barriers include providing the classes and materials in Spanish, framing the treatment as educational, emphasizing that the goal is to help the entire family function better, and holding the classes in the evening at a neighborhood location with dinner and childcare provided.

Class-specific adaptations were made to the DRC, effective instructions, positive and negative attention, taking over the DRC, and final tips for success sessions. These adaptations primarily focused on providing culturally congruent rationales for skills, openly discussing how important cultural values may impact parental receptivity and comfort with employing certain skills, and engaging in steps to create a truly collaboratively relationship between the parent and teacher. Finally, two classes were completely replaced with newly developed, more culturally congruent classes; consistent consequences replaced time out and managing routines replaced token economy.

Initial pilot data is very promising, showing that the culturally adapted treatment is effective with regards to treatment retention and satisfaction, as well as improvement in child symptomatology and parental/family functioning. Specifically, 100% of families successfully completed the culturally adapted parent training program and reported being very satisfied with treatment. This in itself is an impressive outcome given that research suggests that approximately 50% of families prematurely terminate psychotherapy and that this number is even higher for

Table 4
Parent-Reported Child and Parental/Family Functioning Treatment Outcomes

<table>
<thead>
<tr>
<th>Child Functioning</th>
<th>ADHD Symptomatology</th>
<th>Functional Impairment</th>
<th>Parental/Family Functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inattention</td>
<td>H/I</td>
<td>Home</td>
</tr>
<tr>
<td></td>
<td>Pre Post</td>
<td>Pre Post</td>
<td>Pre Post</td>
</tr>
<tr>
<td>1. (10-year-old boy)</td>
<td>7 0*</td>
<td>0 0</td>
<td>.54 .62</td>
</tr>
<tr>
<td>2. (5-year-old boy)</td>
<td>6 3*</td>
<td>5 7</td>
<td>1.67 .92</td>
</tr>
<tr>
<td>3. (8-year-old girl)</td>
<td>9 9</td>
<td>3 3</td>
<td>1.08 1.62</td>
</tr>
<tr>
<td>4. (11-year-old boy)</td>
<td>8 9</td>
<td>9 7*</td>
<td>1.69 1.23</td>
</tr>
<tr>
<td>5. (12-year-old girl)</td>
<td>5 7</td>
<td>2 1*</td>
<td>1.38 1.69</td>
</tr>
<tr>
<td>Group M</td>
<td>7.0 5.4</td>
<td>3.8 3.6</td>
<td>1.27 1.22</td>
</tr>
</tbody>
</table>

Note. Number of symptoms endorsed on the Parent DBD Rating Scale is reported for attention-deficit/hyperactivity disorder (ADHD) symptomatology (range = 0–9 for Inattention and 0–9 for H/I = hyperactivity/impulsivity). Mean impairment in the home is reported for functional impairment (range = 0–3); sum of parenting stress (range = 36–180) and chaos in the home (range = 15–90) is reported for parental/family functioning. With the exception of Child 1 whose father was the participating parent in the group, mothers completed all parent-report measures.

* Improvement with reliable change.
The adapted treatment also included some general cultural adaptations. The culturally adapted ADHD treatment, the next step is to directly compare the adapted treatment to standard, evidence-based treatment in a larger sample of Latino families to determine if the culturally adapted treatment outperforms standard treatment with regards to treatment retention and satisfaction, as well as improved symptomatology and functioning. Future work examining possible moderators (e.g., SES and acculturation) also is needed to determine which families may benefit the most from adapted treatments. Finally, the current study focused on Latinos of Mexican descent, as this is representative of Latinos living in the region where the study was conducted. Future research examining other subgroups of Latino families is needed in order to determine if the culturally adapted treatment findings generalize to other subsets of Latinos.

Abstract

La información de unos grupos de discusión de padres latinos, unas investigaciones sobre valores culturales latinas, y las recomendaciones de proveedores de servicios de salud mental a las familias latinas fueron utilizadas para adaptar un entrenamiento basado en evidencia para los padres de niños latinos con TDAH. Adaptaciones culturales fueron realizadas a cinco sesiones específicas, y dos sesiones fueron sustituidas por dos sesiones nuevas que fueron más congruentes culturalmente. El tratamiento adaptado también incluyó unas adaptaciones generales a todas las sesiones del tratamiento, adaptaciones culturales a la fase de la evaluación y el comentario, y adaptaciones enfocadas en las barreras prácticas al tratamiento. Los resultados iniciales de un pequeño grupo experimental demostraron que el 100% de las...
familias completaron el entrenamiento que fue adaptado culturalmente y reportaron que estaban satisfechos con el tratamiento. También, el 80% de los niños mejoraron fiablemente en relación con la sintomatología de TDAH reportado por los padres, y el 40% de los padres reportaron que mejoraron fiablemente la función de los padres y la familia.

References


