Adaptation of Parent–Child Interaction Therapy for Puerto Rican Families: A Preliminary Study

MARIBEL MATOS†
ROSALIE TORRES†
ROCHELI SANTIAGO†
MICHELLE JURADO†
IXA RODRÍGUEZ†

This study examines how parent–child interaction therapy (PCIT) was adapted for Puerto Rican parents of children aged 4–6 with hyperactivity and other significant behavior problems. Four steps were followed: (1) translation and preliminary adaptation of the treatment manual, (2) application of the treatment to 9 families as part of an exploratory study using repeated measures, (3) treatment revision and refinement, and (4) in-depth interviews with parents (n = 15) and clinical psychologists (n = 5) from Puerto Rico who provided feedback on treatment process and components. Throughout this process, cultural elements and modifications were recommended to be incorporated into the treatment protocol. Both quantitative and qualitative results suggest that PCIT seems to be an acceptable intervention for this population, with some minor changes. Parents reported a high level of satisfaction, a significant reduction in children’s externalizing behavior problems, and reduction of parenting stress and improvement in their parenting practices. Psychologists also evaluated positively the treatment protocol and recommended its use. Results from this study may inform clinicians and researchers who work with Latino families about relevant issues to be considered to promote their participation in behavioral family interventions and to enhance their acceptability and effectiveness.

Keywords: Parent Training; PCIT; Latino Families; Children Behavior Problems; Cultural Adaptation

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†University of Puerto Rico.

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Correspondence concerning this article should be addressed to Dr. Maribel Matos, PO Box 23174, San Juan, Puerto Rico 00931-3174. Tel: (787) 763-3965; Fax: (787) 764-2615. E-mail: m-matos@uprrp.edu

Behavioral parent training is a well-studied intervention in psychotherapy research. Its clinical utility with children and adolescents who exhibit behavioral problems such as aggression, hyperactivity, and noncompliance, among others, is widely documented (Brestan & Eyberg, 1998; Kazdin, 2005; Stormost, 2002; Taylor & Biglan, 1998; Webster-Stratton & Hammond, 1997). Nevertheless, the potentially significant implications for the application of this family intervention may be obscured if some relevant factors are not considered. Examples of such factors are: (1) not all available parenting programs have been empirically validated; (2) families facing multiple stressors and adverse situations may not necessarily benefit from this type of intervention; (3) some programs have not been clearly articulated or are not developmentally appropriate; (4) other programs have been designed to be delivered by parents or people who are not mental health professionals; and (5) the majority of parenting interventions have been developed for English-speaking and Caucasian families from the United States. As Forehand and Kotchick (2002) suggested, some principles and techniques that have been incorporated into these programs may not generalize well to families of other ethnic backgrounds, including Latino families.

Among parent training interventions, parent–child interaction therapy (PCIT) has a strong research base. PCIT is a treatment for behavior problems in young children that is theoretically based, assessment driven, clinically grounded, and empirically supported (Brinkmeyer & Eyberg, 2003; Herschell, Calzada, Eyberg, & McNeil, 2002). The PCIT model has been developed to help parents build a loving and responsive relationship with their child and to deal with their child’s behavior more effectively (Eyberg & Calzada, 1998; Hembree-Kigin & McNeil, 1995). It is conducted in the context of a dyadic play situation and includes two phases: child-directed interaction (CDI) and parent-directed interaction (PDI). Parents are taught and given time to practice specific communication (CDI) and behavior management skills (PDI) with their child in a clinic playroom while being coached by therapists using a bug-in-the-ear microphone from an observation room. Although there is no specified number of sessions, treatment typically requires 10–14 sessions. During CDI, parents are instructed to describe, imitate, and praise the child’s appropriate behavior, reflect appropriate child speech, ignore inappropriate behavior, and allow their child to lead play activity. Parents are also taught not to criticize the child and not to use commands and questions. During PDI parents are taught how to direct their child’s activity while being instructed in the use of clear, positively stated, direct commands and consistent consequences for behavior—for example, praise for compliance, time-out in a chair for noncompliance (3 minutes), time-out in a room if the child left the chair without permission (1 minute). Parents learn to establish and enforce “house rules” and to manage their child’s behavior both at home and in public places.

Outcome research has shown significant improvements in child problem behaviors and in the parent interactional style (e.g., Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993; Nixon, 2001; Schuermann, Foote, Eyberg, Boggs, & Algina, 1998). In addition, treatment gains for both children and parents hold at 1-year follow-up (e.g., Eyberg et al., 2001). However, PCIT, like other parent training approaches, has been studied mostly with Anglo families.

Considering the significant increment of diverse ethnic groups across the United States, especially Latino groups, there is a compelling need to implement and conduct intervention research with different ethnic communities and to incorporate mechanisms that can render program components responsive and appropriate for diverse
communities (NIH Consensus Development Program, 2004). Efforts have been made to research the effectiveness of some parenting programs with ethnic minorities (e.g., Barrera et al., 2002; Gross et al., 2003; Reid, Webster-Stratton, & Beauchaine, 2001). However, little treatment research has been conducted with Latino parents (Miranda et al., 2005).

**Parent Training and Culture**

Parent training has been shown to produce changes in child behavior that lead to improvements in family functioning, such as decreased parenting stress, increased parent self-esteem, and improved parental style interaction and behavior management skills (Brestan & Eyberg, 1998; Kazdin, 2005; Stormost, 2002; Taylor & Biglan, 1998). These programs focus mainly on modifying parenting practices identified as risk factors for the development of significant behavior problems. Evidently, parenting practices are influenced by cultural values, heritage, and history. Therefore, how different parenting styles influence children’s behavior seems to vary depending on the cultural setting in which they are embedded (Darling & Steinberg, 1993). A recent study revealed that ethnicity appears to moderate the relationship between parenting style and externalizing behavior (Lindahl & Malik, 1999). They found that in Latino families, lax and inconsistent parenting was associated with significant behavior problems in boys, whereas a hierarchical parenting style has been associated with a clinical level of behavior problems in boys from European American and biethnic families. This exemplifies that what might be judged as less adaptive behavior in one ethnic group may be understood as more adaptive and psychologically healthy behavior in another.

Families from different ethnic backgrounds or cultural groups share a distinctive system of values, beliefs, and practices that overlap but that also differ in some aspects from that of other groups or cultures (García-Coll, Meyer, & Brillon, 1995). Depending on their background, families may emphasize different child-rearing values. For example, Puerto Rican mothers highlight values such as respect, loyalty, and obedience in their young children, whereas Caucasian mothers tend to emphasize independence, autonomy, and assertiveness (González-Ramos, Zayas, & Cohen, 1998). In contrast to Puerto Rican mothers, Anglo mothers tend to generate child-rearing strategies consonant with a more individualistic orientation, placing less emphasis on directing the infants’ learning experiences and, accordingly, strengthening the child’s sense of autonomy and personal choice. Puerto Rican mothers tend to focus on child-rearing strategies that directly structure their children’s behavior and promote a sense of individual obligation and connectedness to others (Harwood, Schoelmerich, Schulze, & Gonzalez, 1999). Other studies suggest that Latino parents tend to use more nurturing and permissive child-rearing practices and fewer strict discipline strategies than African American parents (García-Coll et al.; Gross et al., 2003).

A growing body of literature suggests that clinicians should be aware of the particular cultural beliefs and values associated with the socialization of children, and understand how these values and beliefs influence parenting practices and children’s behavior (Falicov, 1998; Forehand & Kotchick, 1996; McGoldrick, Giordano, & García-Preto, 2005). Parents could be deemed, appropriately, to be resistant to treatment if they do not accept parenting skills training based on a different value orientation.
(González-Ramos et al., 1998). Thus, it may be necessary to modify parent training programs to incorporate the values, beliefs, and practices of the Latino culture. Although there are numerous political, historical, and socioeconomic circumstances that distinguish the multiple Latino American groups, several cultural norms appear to be common among all of them (Falicov; García-Preto; Marín & Marín, 1991). One such primary value is familism, which is the view of family as the main source of support and the center of loyalty and solidarity for family members. Other basic shared cultural values are: personalismo (emphasis on warm relationships with family and friends); respect (being respectful to others, especially authority figures); and time orientation (emphasis on the present, whereas planning for the future, “efficiency,” and punctuality are not as emphasized).

Parent training programs targeting Latino parents may need to take into consideration the incorporation of key family members who share child-rearing responsibilities; the importance given to close family relationships, interpersonal responsiveness, interdependence, personal dignity, and respect; and the lesser emphasis placed on punctuality, planning, and efficiency (Forehand & Kotchick, 1996; García-Coll et al., 1995; Marín & Marín, 1991). In the process of revising traditional parent training programs, it is also important to determine which behaviors are perceived by the parents to be problematic and to what degree they accept the skills to be taught in the program (Forehand & Kotchick, 1996). PCIT incorporates key elements and strategies of play and behavior therapies throughout the treatment process, and there is scarce evidence regarding how parents perceive and assess them.

The aims of this article are to (1) present the adaptation of PCIT for Puerto Rican parents of children aged 4–6 with hyperactivity and significant behavior problems; (2) describe the cultural elements and modifications incorporated into the treatment manual, along with the process of refining and revising the treatment; (3) present data on the feasibility and acceptability of PCIT for Puerto Rican families; and (4) present a preliminary evaluation of the intervention’s impact, using qualitative and quantitative data to examine process and outcomes as part of the treatment development and adaptation process.

**METHOD**

This study is part of a larger project that aims to adapt PCIT for Puerto Rican children with hyperactivity and significant behavior problems and to evaluate its initial efficacy.¹ Procedures used in this study are similar to those proposed by Rounsaville, Carroll, and Onken (2001) in their stage model of behavioral therapies research. The present study is comparable to Stage I, as described by these authors, in that it involves the translation and adaptation of a treatment manual and an exploratory study to evaluate the acceptability and feasibility of the treatment, and to assess any clinically significant improvements. In addition, we conducted in-depth interviews with parents who had completed PCIT treatment and with psychologists who provided feedback on both process and components.

The process of translation and adaptation was guided by a framework of cultural sensitivity for outcome research (Bernal, Bonilla, & Bellido, 1995; Bernal and

¹Results of this study will be reported in a subsequent article.
Sáez-Santiago, 2005). It focuses on eight culturally sensitive elements for intervention: language (whether it is appropriate and culturally syntonic); person (role of client-therapist sociocultural similarities and differences in shaping therapy relationships); metaphors (symbols and concepts shared by culture members); content (cultural knowledge of the group); concepts (treatment concepts consonant with culture); goals (support of positive and adaptive cultural values); methods (cultural adaptation of treatment methods); and context (consideration of changing contexts).

Next, the description of the four procedural steps in the treatment adaptation, development, refinement, and evaluation process are presented. These steps are also used to organize the Results section.

First Step: Translation and Preliminary Adaptation of PCIT Manual

The treatment manual and the parent handouts were translated into Spanish by research team members, who not only had clinical experience with Latino children and their families but also had sufficient knowledge and understanding of the English language. The vast majority of members of the research team were born and raised in different cities of Puerto Rico, both in rural and urban areas. The only exception was one member, who was from Colombia. Our goal was to develop a version of the manual with the content, procedures, and guidelines included in the English version but adapted to the sociocultural context of Puerto Rican families living on the island. The investigators played a major role in the revision of the translated manual, assuring that its content was equivalent to the English version.

Second Step: Application of PCIT to 9 Families

Twelve children were referred to participate in an exploratory study using repeated measures. They were screened for hyperactivity and significant behavior problems. Children were eligible if they met the following criteria: they were between 4 and 6 years of age; their mothers had complaints of significant child hyperactivity and high rates of noncompliance, defiance, aggressiveness, and destructiveness as measured by one of the screening measures; they displayed no evidence of significant sensory, language, neurological, or pervasive developmental difficulties; their mothers are Puerto Rican; they have an IQ \( \geq 80 \); they were not receiving treatment with stimulant or other psychotropic medication; and they had parents’ agreement not to participate in any other form of child psychotherapy or pharmacotherapy until completion of study participation. Parents were told about other treatment options and informed of their right to leave the treatment at any time. Other inclusion criteria included absence of domestic violence, severe major depression, substance abuse, psychopathology, and severe mental retardation in participating parents.

Participants

Ten families were recruited for this phase. All families lived in Puerto Rico and had not faced the stressors related to immigration and acculturation, in contrast to the experiences of Latino families in the United States. They were given a stipend of $15, $25, and $40 for the completion of pretreatment, posttreatment, and follow-up assessments, respectively. All but one family completed treatment (this case withdrew from the study after initial assessment and orientation and did not formally initiate
The remaining families included the children, their mothers, and 7 fathers (including 1 stepfather). Two mothers were single parents, and their children’s fathers declined to participate in the treatment. Seventy-seven percent of participating children were males, and their mean age was 4 years, 9 months. The mean IQ scores were within the normal range ($M = 104.4$, $SD = 10.08$). Participating mothers’ and fathers’ ages ranged from 25 to 43 ($M = 31.89$, $SD = 6.31$) and 27 to 43 ($M = 32.86$, $SD = 5.34$), respectively. Mothers’ mean education was 15.6 years (nearly a BA degree, $SD = 1.59$) and ranged from 14 (associate’s degree) to 19 years (postgraduate degree). Fathers’ educational level was similar ($M = 16.00$, [BA], $SD = 3.79$, range: [12][HS] to 23). Seven mothers had full-time jobs, one worked part time, and one was a college student. Fathers worked full time.

According to the mothers’ reports on the diagnostic interview (DISC), 7 children (78%) met diagnostic criteria for ADHD (combined or predominantly hyperactive type). In addition, 89% of the children fulfilled diagnostic criteria for ODD (mean number of symptoms = 6.22, $SD = 2.05$). Children’s current level of impairment in adaptive functioning, as derived from the examiners’ C-GAS ratings, ranged from 48 to 60 ($M = 52.67$, $SD = 3.74$), which indicated that the sample was clinically impaired.

**Screening and outcome measures.** Mothers completed a set of measures to evaluate child’s behavior, family stress, parenting practices, and treatment at three different times: pretreatment, posttreatment, and 3-month follow-up. Fathers were not included in the outcome measures. The questionnaires developed for English-speaking participants were translated into Spanish following a cross-cultural model (Bravo, Woodbury-Fariña, Canino, & Rubio-Stipec, 1993).

**Disruptive Behavior Scale for Children.** The Disruptive Behavior Scale for Children (DBRS), used as a screening and outcome measure, contains the 18 ADHD symptom items and eight ODD symptom items for the DSM-IV (Barkley, 1997). Internal consistency (alpha) of the Spanish ADHD and ODD scales ranges from .90 to .95, and the test-retest reliability ranges from .81 to .86 over a period of 4–6 weeks (Cumba, Santiago, Rodriguez, & Matos, 2002). Screening norms for hyperactivity developed by DuPaul et al. (1998) for preschool-aged children were employed in this study. Because no norms were available for hyperactivity for 4-year-old children or for ODD at any age level, the number of symptoms was used as the screening criteria (4 or more for hyperactivity and 3 or more for ODD).

**Subscales of hyperactivity and aggression of the Behavioral Assessment System for Children-Parent Rating Scales.** The Behavioral Assessment System for Children-Parent Rating Scales (BASC-PRS; Reynolds & Kamphaus, 1998) yields ratings of children’s behavior and adaptive functioning. In this study, only two subscales were used—hyperactivity and aggression—as screening and outcome measures. The internal consistency of these subscales ranges from .82 to .93 when used with Puerto Rican preschoolers. Concurrent and construct validity were also appropriate (Cumba et al., 2002).

**The Peabody Picture Vocabulary Test.** The Peabody Picture Vocabulary Test (PPVT-HAA; Hispanic American Adaptation; Dunn, Padilla, Lugo, & Dunn, 1986) is a

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2 Compared with other families, this one faced more socioeconomic stressors.
standardized test that measures receptive vocabulary in Spanish-speaking individuals who are at least 2.5 years of age. The PPVT has been shown to be significantly correlated with tests of intellectual functioning.

**NIMH Diagnostic Interview Schedule for Children IV—Parent Version.** The NIMH Diagnostic Interview Schedule for Children IV—Parent Version (NIMH-DISC IV, 1997), a structured diagnostic interview, was developed to assess DSM IV diagnoses in children (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). The NIMH-DISC-IV was translated and adapted for Puerto Rican children and has good psychometric properties (Canino, 2000). The ADHD, ODD, generalized anxiety disorder, separation anxiety disorder, major depression, and dysthymia modules were administered for this study.

**Children’s Global Assessment Scale–Spanish.** The Children’s Global Assessment Scale–Spanish (CGAS; Bird, Canino, Rubio-Stipec, & Ribera, 1987) yields ratings of children’s impairment in adaptive functioning. Scores range from 1 (most impaired) to 100 (healthiest). This scale has excellent test-retest interrater reliability and adequate discriminant and concurrent validity for Puerto Rican children.

**Eyberg Child Behavior Inventory.** The Eyberg Child Behavior Inventory (ECBI) is a 36-item parent report measure of conduct problems with established reliability and validity (Eyberg & Pincus, 1999). The ECBI assesses behavior on two scales: the intensity scale (IS) and the problem scale (PS). The IS measures the frequency with which conduct problem behaviors occur. The PS measures the number of behavior problem items that parents report to be problematic for them. For Puerto Rican preschoolers, the internal consistency (alpha) of the IS and PS scales are .95 and .94, and the test-retest reliability .85 and .83, respectively (Cumba et al., 2002).

**Child Behavior Checklist.** The Child Behavior Checklist (CBCL; Achenbach, 1991), a well-known scale, yields ratings of psychopathological symptoms across a variety of narrow and broad-band dimensions. It was translated into Spanish and culturally adapted for use in Puerto Rico and has satisfactory reliability and validity. For purposes of this study, only the externalizing and aggressive scales are reported.

**Family Experiences Inventory.** The Family Experiences Inventory (FEI; Bauermeister, Matos, & Reina, 1999) was developed to assess stressful experiences associated with the mother–child relationship, family social life, mother–child’s teacher relationship, family finances, and child–siblings relationships. The internal consistency and test-retest reliability (over 4–6 weeks) with Puerto Rican preschoolers are .95 and .79, respectively (Cumba et al., 2002).

**Parent Practices Inventory.** The Parent Practices Inventory (PPI; Salas, 2003) assesses parental monitoring and supervision, involvement, and discipline in general. Previous analyses with Puerto Rican preschoolers show that the internal consistency (.86) and the test-retest reliability (.78) of the IPC are excellent (Cumba et al., 2002).

**Treatment and Evaluation Survey.** The Treatment and Evaluation Survey (TES; Matos, 1997) was developed by Matos (1997) as part of a parent training study that she conducted with Puerto Rican families. It includes questions assessing perceived par-
ent satisfaction with treatment, effective application of treatment strategies at home, quality of therapist–client relationship, and recommended changes to improve treatment.

The Therapy Attitude Inventory. The Therapy Attitude Inventory (TAI; Eyberg, 1993) is a consumer satisfaction measure that addresses the impact of parent training on areas such as confidence in discipline skills, quality of the parent–child interaction, child behavior, and overall family adjustment. It yields total scores between 10 and 50. The TAI has been shown to have adequate reliability, validity, and sensitivity to treatment effects (Brestan, Jacobs, Rayfield, & Eyberg, 1999). It was translated into Spanish by the research team.

Treatment format. A session lasting 1 1/2 hours was conducted once a week. Each family was seen individually by two cotherapists, who were advanced clinical psychology graduate students. Therapists participated in weekly supervision sessions. Treatment was time unlimited and was completed when parents mastered the interaction skills, no longer informed significant behavior problems, and expressed feeling ready to terminate. The mean number of sessions for families who completed treatment was 16. (For additional details, see Eyberg & Calzada, 1998.)

Third Step: Treatment Revision and Refinement

The goal of this step was to further revise and adapt the PCIT model for Puerto Rican children. Recommendations given by parents at the end of treatment in the TES were taken into account, as well as the regular research team meetings with therapists discussing the process of application with each family. A revision of the content and format of the treatment manual and parent handouts followed, and the necessary changes were incorporated.

Fourth Step: In-depth Interviews With Parents and Clinical Psychologists

In the interest of exploring the cultural adaptation of PCIT more deeply, elements of qualitative research were incorporated. In-depth interviews with 15 parents (9 mothers and 6 fathers) who had completed PCIT and 5 Puerto Rican clinical psychologists who examined the treatment manual were conducted. Originally, the parents’ interviews were planned to be conducted with the same sample of the second step, but not all families were available. The sample was then completed with families who were part of the larger project and also met the previously described research criteria. Consequently, the latter families received the preliminary adapted version of PCIT with the minor changes explained in the Results section (third step). The final sample was composed of 5 mothers and 2 fathers from the exploratory study and 4 mothers and 4 fathers from the pilot efficacy study.

These parents’ sociodemographic characteristics were comparable with those of the families from the second step. Mothers’ and fathers’ ages ranged from 22 to 41 ($M = 32.22$, $SD = 5.83$) and from 31 to 43 ($M = 35.16$, $SD = 4.36$), respectively. Mothers’ mean education was 15.33 years ($SD = 1.00$) and ranged from 14 to 16 years. Fathers’ educational level was similar ($M = 15.00$, $SD = 1.55$) from 13 to 17 years. Seven mothers had full-time jobs, and 2 worked part time. All fathers worked full time. The 5 clinical psychologists had doctorate degrees in clinical psychology, more
than 5 years of clinical professional experience, and considerable experience in the assessment and treatment of child psychopathology, including ADHD, ODD, and CD.

Parents and psychologists were asked to examine the structure and content of PCIT, to evaluate the parenting skills to be taught, and to identify cultural barriers or values that must be considered to enhance treatment effectiveness, among other matters. Each interview was transcribed and analyzed using the Atlas.ti program for qualitative analyses (Muhr, 1997). See Table 1 for the topics discussed with informants.

### RESULTS

**First Step: Translation and Preliminary Adaptation of PCIT Manual**

As mentioned, the PCIT manual was translated into Spanish and revised and preliminarily adapted following a framework of cultural sensitivity of interventions (Bernal et al., 1995). In accordance with the dimension of *language*, some examples given in the original manual were modified to make them more attuned to the daily experiences of Puerto Rican children (e.g., chimney and snowman were replaced by stove and doll, respectively). In addition, simple terms were used instead of technical psychological concepts. Moreover, because all the therapists and investigators grew up in Puerto Rico and spoke Spanish as their first language, facing evident difficulties in communicating with the families was not anticipated.

As part of the initial treatment adaptation, a psychoeducational module, which consisted of two 2-hour sessions, was also included. Some of the topics discussed were descriptions of hyperactivity and its relationship to behavior problems, associated difficulties, risks and protective factors, possible etiologies, and treatment options. The addition of this module helped parents to better understand the nature of the difficulties exhibited by their children and to establish more realistic expectations of the possible treatment outcomes. Sessions were offered in an interactive

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**Table 1**

*In-Depth Interview Topics*

<table>
<thead>
<tr>
<th>Topics</th>
<th>Informant</th>
</tr>
</thead>
<tbody>
<tr>
<td>First impression of the treatment</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Description of a healthy parent–child interaction</td>
<td>P</td>
</tr>
<tr>
<td>Professional experience with PCIT skills and strategies</td>
<td>Psy</td>
</tr>
<tr>
<td>Opinions and recommendations of PCIT format and duration</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Applicability of PCIT strategies to Puerto Rican families and children who exhibit hyperactivity and behavior problems</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Evaluation of CDI and PDI skills (e.g., easiest, most useful, and so on)</td>
<td>P</td>
</tr>
<tr>
<td>Cultural, personal, and spiritual values that should be considered</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Opinions and recommendations about homework</td>
<td>P</td>
</tr>
<tr>
<td>Opinions about time-out procedures (chair and room)</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Utility of educational handouts and other topics to be considered</td>
<td>Psy</td>
</tr>
<tr>
<td>Therapist’s role in the treatment</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Reasons for recommending PCIT</td>
<td>P, Psy</td>
</tr>
<tr>
<td>Possible modifications to PCIT</td>
<td>P</td>
</tr>
<tr>
<td>Viability of PCIT in child mental health clinics and possible modifications</td>
<td>Psy</td>
</tr>
<tr>
<td>Alternate name for PCIT and its phases</td>
<td>P, Psy</td>
</tr>
</tbody>
</table>

P = Parents; Psy = Psychologists.
manner, which enabled us to understand the particularities and complexities of each family.

Second Step: Application of PCIT to 9 Families

A total of 9 families completed treatment, including the posttreatment assessment, and 8 completed the follow-up evaluation. Next, we briefly discuss other culturally sensitive elements included throughout the treatment application process.

We gave close consideration to the dimension of person because it emphasizes the client–therapist relationship during treatment. Parents seemed to feel comfortable with their respective therapists and showed them their gratitude by giving them presents such as candies and greeting cards. This practice is highly common within the Puerto Rican cultural context. Such a gesture is related to the value of personalismo, which emphasizes the importance of establishing close personal contact with people to whom one relates. Mothers’ reports indicated that they felt understood, confident, and supported by their therapists ($M = 4.88, SD = 0.35$; maximum score in each category = 5), and comfortable ($M = 4.75, SD = 0.16$).

Another modification that reflects our consideration of the dimensions of person and context was the provision of additional time to discuss with the parents issues not directly related to the child’s problem. We found that families and therapists typically spent around 20 minutes (instead of the 5 minutes proposed in the original manual) discussing contextual issues that were perceived as stressors and that could interfere with family progress. These issues included transportation, siblings’ care giving, financial difficulties, and work-related situations. This not only strengthened the therapeutic relationship but also helped the families stay in treatment.

The dimension of metaphors was exemplified in our use of idiomatic expressions to explain concepts during treatment or during conversations with parents. Expressions such as “se formó un tiri-jala” (they got into a dispute, quarrel); “malascrianzas” (bad manners); “trepando paredes” (climbing walls); “cantaleteo” (nagging); “qué chévere” (terrific/cool), among others, are commonly used to describe children’s behaviors, parenting practices, or praises.

In keeping with the dimension of content, we were attentive to any situation or problem reported by parents that was not directly addressed in the manual. One of the issues most consistently reported was related to concerns about how to incorporate into the treatment process extended family members who play child-rearing roles, particularly grandparents. These concerns reflect the value of familism in the Puerto Rican culture. Recognizing the centrality of this value, time was dedicated to discussing how parents could explain the treatment strategies to their family members in order to encourage their support and prevent them from interfering with treatment application (e.g., inconsistent discipline) to the extent possible. Although grandparents were not expected to practice treatment procedures, we emphasized the need to transmit to them the basic strategies so that they could better understand the process that the family was going through. Limited resources prevented us from including them in treatment.

We found the treatment dimensions concepts and goals to be in agreement with parents’ expectations of children’s behaviors and family relationships. PCIT emphasizes concepts such as attachment, family relationships, and discipline, along with goals directed toward enhancing and increasing warmth in parent–child relationships.
and improving parents’ management of their child’s behavior. All these concepts and goals are framed within values that Puerto Rican families view as acceptable. Children with serious behavior problems and difficulties being accepted by relatives and friends present a challenge for parents because there is a significant disparity between these problems and cultural values such as respect, obedience, and interpersonal connectedness. The element of concepts also takes into account how the problem is conceptualized and communicated to parents regardless of whether they agree with our definition. In this stage, the child’s problem was conceptualized as a manifestation of multiple interacting factors: biological, family interaction, contextual, and developmental. Parents seemed to feel comfortable with our approach; the best indicator was that all but 1 family completed all phases of treatment.

Concerning the element of methods, parents did not express any objections except for allowing the child to direct the play (CDI) and using time-out procedures in the room (PDI). The former was initially interpreted by some parents as a way of losing control, whereas the latter was evaluated as too demanding.

Analyses were conducted to explore consumer satisfaction, possible changes in children’s behavior, and other family variables reported by mothers after treatment. Mothers reported a high level of satisfaction on the TAI \(M = 48.67, SD = 1.32\). Paired samples \(t\) tests were performed to evaluate mean differences in outcome measures across evaluations. Significant improvements from pretreatment assessment to posttreatment assessment were found on all outcome measures (Table 2). Treatment gains were also sustained at the 3-month follow-up evaluation. Following guidelines set forth by Jacobson and Truax (1991), we proceeded to evaluate the degree to which these changes were clinically significant. Based on the findings of a previous study (Cumba et al., 2002), we calculated two SDs on the ECBI, DBRS, PPI, and FEI. The cutoff points obtained for each measure were: 150 (ECBI-Intensity), 24 (ECBI-Problem), 21 (DBRS-Hyperactivity), 17 (DBRS-ODD), 91 (PPI), and 40 (FEI). We also

### Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pretreatment ((n=9))</th>
<th>Posttreatment ((n=9))</th>
<th>df</th>
<th>(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBRS-Hyp.</td>
<td>20.00</td>
<td>14.13</td>
<td>7</td>
<td>5.08***</td>
</tr>
<tr>
<td>DBRS-ODD</td>
<td>14.00</td>
<td>6.38</td>
<td>7</td>
<td>7.92***</td>
</tr>
<tr>
<td>BASC-Hyp.</td>
<td>35.25</td>
<td>19.25</td>
<td>7</td>
<td>9.29***</td>
</tr>
<tr>
<td>BASC-Aggressive</td>
<td>18.63</td>
<td>9.50</td>
<td>7</td>
<td>4.29**</td>
</tr>
<tr>
<td>CBCL-Ext.</td>
<td>69.33</td>
<td>58.22</td>
<td>8</td>
<td>4.98***</td>
</tr>
<tr>
<td>CBCL-Aggressive</td>
<td>73.67</td>
<td>59.56</td>
<td>8</td>
<td>9.95***</td>
</tr>
<tr>
<td>ECBI-Intensity ((T))</td>
<td>69.00</td>
<td>51.78</td>
<td>8</td>
<td>6.35***</td>
</tr>
<tr>
<td>ECBI-Problem ((T))</td>
<td>74.67</td>
<td>47.00</td>
<td>8</td>
<td>10.28***</td>
</tr>
<tr>
<td>PPI</td>
<td>81.78</td>
<td>95.44</td>
<td>8</td>
<td>−5.67***</td>
</tr>
<tr>
<td>FEI</td>
<td>50.89</td>
<td>29.00</td>
<td>8</td>
<td>5.33***</td>
</tr>
</tbody>
</table>

DBRS = Disruptive Behavior Rating Scale; Hyp. = Hyperactivity; BASC = Behavioral Assessment System for Children; CBCL = Child Behavior Checklist; Ext. = Externalizing Problems; ECBI = Eyberg Child Behavior Inventory; PPI = Parent Practices Inventory; FEI = Family Experiences Inventory.

\(*p < .01. \quad \text{\(*\)*}p \leq .001.\)
calculated the reliable change index (RCI) for some of the most relevant dependent measures and found that 89% of patients showed clinically significant improvements in the ECBI-Intensity and the ECBI-Problem; 62% of participants showed significant improvements in ADHD-Hyperactivity; and 88% demonstrated a reliable change in ODD scores. In the PPI and the FEI, 56% and 78% of participants showed a reliable change, respectively.

Third Step: Treatment Revision and Refinement

Based on the results and experiences during the second step, we made several modifications to the treatment manual. First, we revised the termination criteria for CDI and PDI and established a maximum of eight sessions for CDI and nine sessions for PDI. This number of sessions proved to be sufficient to accomplish the treatment goals during the first phase of this research. Second, we added a handout about pharmacological treatment for ADHD. Although the children were not on medication, parents consistently expressed concerns about this issue. Third, we modified the implementation of the time-out procedures for those children who actively refused to go to the time-out chair or room and demanded the use of excessive force by the parents. As an alternate procedure, we proposed the loss of privileges. Fourth, we revised the instructions and explanations given to the children at the beginning of each stage and prepared our own scripts. Fifth, we extended the duration of each session to 1.5-hour instead of the 1-hour time frame established in the manual. Treatment sessions usually lasted more than an hour, especially when both parents participated in treatment. Sixth, we incorporated the discussion of how other members of the extended family participated in child-rearing processes and gave parents recommendations to deal with inconsistencies or other conflicts related to this situation. Our objective was to strengthen family cohesion and not isolate the nuclear family from the extended family. Finally, we modified the style of presentation and discussion of the handouts to make them more attractive and user friendly. Instead of giving the handouts to the parents at the beginning of each session, we gave them at the beginning of each stage, which enabled parents to study the handouts prior to their discussion.

Fourth Step: In-depth Interviews with Parents and Clinical Psychologists

Qualitative analysis of interview responses suggests that both parents and psychologists considered PCIT an acceptable and effective treatment for younger children with hyperactivity and other significant behavior problems. We found that both groups positively evaluated the treatment and considered it effective for the management and reduction of children’s behavioral problems, improvement of family relationships, and development of parents’ sense of competence. All parents showed good understanding of the treatment strategies and techniques, and they felt comfortable recommending PCIT to other families. They reported that PCIT helped them become more patient and accepting, yet more firm in the management of their child’s behavior, and to deal more appropriately with their own negative emotions (e.g., anger). They approved the format in which treatment was delivered, and all of them clearly rejected changing the order in which CDI and PDI were given, as done.
in a previous investigation (Eisenstadt et al., 1993). Parents also expressed feeling understood and supported by therapists throughout the treatment process, especially during difficult and demanding situations.

Parents and psychologists concluded that, for the most part, PCIT components are not in conflict with personal, spiritual, or cultural values held by Puerto Rican families. The only exception was the use of the time-out room; two psychologists expressed concerns about whether parents had accepted it, and 10 parents questioned its use. Although effective to reduce children’s behavior problems, they described it as too emotionally demanding. Some described their experiences with the time-out room: “It was cruel, I felt like my kid was feeling abandoned by me”; “I didn’t want to hurt him”; and “It’s like a jail.” Five parents recommended the use of the time-out room based on the positive changes observed in their children’s behavior.

Parents were asked to evaluate whether they found the techniques or strategies used in PCIT to be useful in the management of their child’s behavior and whether they were easy or difficult to master. Only responses endorsed by 5 or more parents, which could show a tendency, are reported. The more useful techniques were the use of labeled praises, behavior descriptions, and privileges removal, and no strategy was identified as useless. Giving labeled praises, imitating the child’s play, reflecting the child’s verbalizations, describing positive behavior of children, giving effective commands, and loss of privileges were assessed as easier to implement. On the other hand, CDI skills, such as avoiding questions and commands, were considered more difficult to implement, as was actively ignoring the child’s inappropriate behavior. To improve PCIT acceptability, parents and psychologists recommended the inclusion of other family members, such as siblings and grandparents, confirming our initial plan to include them. Parents also recommended the inclusion of opportunities to watch videos of other families who have successfully completed treatment and to watch their own videos to see themselves interacting with their child.

**DISCUSSION**

This study shows how PCIT was adapted for Puerto Rican parents of younger children with high rates of hyperactivity and significant behavior problems. To our knowledge, this is the first study that has been conducted in Puerto Rico with the aim of culturally adapting an evidence-based parenting program for this population. This study is important to and different from other studies with ethnic minorities in the United States because it was done outside the mainland by Puerto Rican investigators and therapists and with a group of families living in Puerto Rico who have not faced the stressors related to immigration and acculturation. The present study may inform clinicians working with Puerto Rican families, both inside and outside Puerto Rico, about issues that should be considered when conducting PCIT or other behavioral interventions to increase acceptability and effectiveness.

Results are encouraging, suggesting that PCIT seems to be an acceptable intervention for this population, although it was not originally developed for Latino families. Parents reported a significant reduction in children’s behavioral problems and hyperactivity, and reduced parenting stress and improved parenting practices. These treatment gains were maintained at the 3-month follow-up. Parents also reported a high level of satisfaction with treatment and with the work done by therapists. The low attrition rate (10%) is also a good indicator of parents’
satisfaction. Our data suggest that Puerto Rican families with younger children may be responsive to this type of treatment. Results are also consistent with other studies conducted with Caucasian families and other minority groups (Barrera et al., 2002; Reid et al., 2001).

Although parents showed good understanding and acceptance of PCIT techniques and skills, some difficulties were reported regarding implementation. Ignoring the negative behavior exhibited by their children and avoiding asking questions or giving commands during CDI were assessed as the most difficult to master. During sessions, parents tended to question the use of ignoring their children because they viewed this as doing nothing. These results are consistent with prior studies suggesting that Puerto Rican mothers tend to structure their children’s behavior more directly (Harwood et al., 1999). Nevertheless, other investigators working with families in the mainland have also found that ignoring is a difficult technique to implement (Hembree-Kigin & McNeil, 1995), which may rule out any cultural interpretation.

In our study, the use of the time-out room emerged as the most relevant issue. Parents tended to consider the time-out room as effective in managing children’s behavioral problems, but most were not willing to use it as a disciplinary procedure after treatment. Although parents usually observed their children through the one-way mirror, they did not feel comfortable leaving them alone. This experience was characterized as abandonment and tended to provoke feelings of distress in parents. Some of the psychologists expressed similar views. This finding could be related to data derived from other studies, which indicate that Latino parents tend to use more warm and nurturing child-rearing practices than other ethnic groups (Garcia-Coll et al., 1995; Gross et al., 2003). The unwillingness to use the time-out room must be studied carefully before making any decision regarding its use. Our sample was too small to make generalizations.

Compared with time stipulations indicated in the treatment manual, most Puerto Rican families required additional time to accomplish the goals of each session. Consistently, parents recommended increasing the time dedicated to conversing with them and engaging in social interactions at the beginning of the sessions. This outcome depicts the importance of close relationships to Puerto Rican and other Latino families. Evidently, clinicians working with Latino families should be aware of this to establish a positive therapeutic relationship. As Falicov (1998) and García-Preto (2005) recommended, therapists working with Latino families should transmit real interest starting with the initial social phase. Instead of focusing on procedures, therapists should manifest interest in the family and how they define and cope with their problems. This is also important to reduce attrition.

Another issue that consistently emerged was the recommendation to include other family members in treatment, especially grandparents. This is consistent with the deep sense of familialism and reliance on extended families that characterize Latino families. It is well known that child-rearing responsibilities among Latinos are shared by parents, older siblings, and extended family members (Falicov, 1998).

Although results from outcome measures are favorable, they are solely based on mothers’ reports. The absence of fathers’ outcome measures is considered a limitation. Mothers and fathers may have different parenting experiences with their disruptive children, which highlights the importance of including fathers throughout assessment and treatment processes (Calzada, Eyberg, Rich, & Querido, 2004).
Another limitation is that we used measures that are not normed for our population because they were not available. Nevertheless, the high rates of ADHD and ODD symptomatology and the high level of impairment as assessed by the DISC and C-GAS, respectively, suggest that our sample had clinically significant problems and that the instruments were useful to identify them. It should also be noted that the outcomes from this study should be carefully interpreted because our experience could be different when working with families who are exposed to additional stressors (e.g., migration, acculturation, racism, lower educational level). Further research should consider these limitations and address the use of the time-out room and other PCIT strategies. Additional research could bring light on how the inclusion of the psychoeducational module might influence parents’ evaluation of PCIT.

Following the treatment development model proposed by Rounsaville et al. (2001), we are ready to move to a next stage. Our team has developed a PCIT manual adapted for Puerto Rican families of younger children with hyperactivity and behavior problems. Quantitative data obtained in this pilot study suggests that families are benefiting from PCIT and reporting clinically significant changes. Clearly, no causal inferences may be drawn because the study did not include a control group, and the sample size was small. However, results are encouraging, and a randomized trial of the adapted PCIT is an avenue for future development.

REFERENCES


