Cultural Adaptation of Cognitive Behavioral Therapy (CBT) for Puerto Rican Youth

Date of Review: December 2010

Cultural Adaptation of Cognitive Behavioral Therapy (CBT) for Puerto Rican Youth is a short-term intervention for Puerto Rican adolescents aged 13-17 years who are primarily Spanish speaking and have severe symptoms of depression. The intervention focuses on improving an adolescent's cognitions, behaviors, and relationships, with the goals of shortening the time that the adolescent feels depressed, reducing his or her depressive feelings, increasing the adolescent's sense of control over his or her life, and teaching the adolescent how to prevent the onset of depression.

The intervention was adapted from a cognitive behavioral model, considering cultural, developmental, and socioeconomic factors. The adaptation was informed by a framework for ecological validity (i.e., familiarity between the adolescent's experiences of his or her ethnocultural and linguistic context and the cultural properties of the treatment) and culturally sensitive criteria (i.e., language, persons, metaphors, content, concepts, goals, methods, context).

The intervention is delivered by a trained therapist in either an individual or group format. It consists of 12 weekly, 1-hour sessions and includes an option for 4 additional sessions. The 12 sessions are divided into three modules:

- Thoughts Module (sessions 1-4), which describes how thoughts influence mood
- Activities Module (sessions 5-8), which describes how activities influence mood
- Interpersonal Module (sessions 9-12), which describes how interactions with other people affect mood

After the 12 sessions have been completed, the therapist reviews each adolescent's progress and decides whether the additional sessions are necessary and, if so, what those sessions will entail.

To deliver the intervention, a therapist must have at least a master's degree and also must have completed an 18-hour training, which includes video observations, role-plays, and readings. Therapists also receive an hour of weekly supervision during the course of the 12-week treatment.

In studies reviewed for this summary, Puerto Rican adolescents identified as having symptoms of depression received the intervention after being referred by local schools, clinics, and mental health professionals.

Descriptive Information

<table>
<thead>
<tr>
<th>Areas of Interest</th>
<th>Mental health treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes</td>
<td></td>
</tr>
<tr>
<td>1: Symptoms of depression</td>
<td></td>
</tr>
<tr>
<td>2: Internalizing symptoms</td>
<td></td>
</tr>
<tr>
<td>3: Externalizing symptoms</td>
<td></td>
</tr>
<tr>
<td>4: Self-concept</td>
<td></td>
</tr>
<tr>
<td>Outcome Categories</td>
<td>Mental health</td>
</tr>
<tr>
<td></td>
<td>Social functioning</td>
</tr>
<tr>
<td>Ages</td>
<td>13-17 (Adolescent)</td>
</tr>
<tr>
<td>Genders</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Races/Ethnicities</td>
<td>Hispanic or Latino</td>
</tr>
<tr>
<td>Settings</td>
<td>Outpatient</td>
</tr>
<tr>
<td></td>
<td>Other community settings</td>
</tr>
<tr>
<td>Geographic Locations</td>
<td>Urban</td>
</tr>
</tbody>
</table>
### Implementation History

This intervention was first implemented in 1992 at the University of Puerto Rico, Río Piedras Campus. Since then, 198 Puerto Rican adolescents have received this intervention.

### NIH Funding/CER Studies

Partially/fully funded by National Institutes of Health: Yes  
Evaluated in comparative effectiveness research studies: Yes

### Adaptations

No population- or culture-specific adaptations were identified by the applicant.

### Adverse Effects

No adverse effects, concerns, or unintended consequences were identified by the applicant.

### IOM Prevention Categories

IOM prevention categories are not applicable.

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## Outcomes

### Outcome 1: Symptoms of depression

**Description of Measures**

Symptoms of depression were assessed using the Children's Depression Inventory (CDI), which was translated into Spanish and culturally adapted while maintaining semantic, content, technical, and conceptual equivalence to the original instrument. The CDI is a 27-item, self-report scale suitable for use with school-aged children and adolescents. The CDI measures a wide range of depressive symptoms, including disturbances in mood and capacity to enjoy activities, self-evaluations, and interpersonal behavior. For each item, the adolescent describes his or her feelings during the past 2 weeks, using a scale ranging from 0 (absence of the symptom) to 2 (severe symptom).

**Key Findings**

In one study, adolescents were randomly assigned to one of three study conditions: CBT, individual psychotherapy (IPT), or a wait-list control. From pre- to posttest, participants who received CBT and those who received IPT had a reduction in symptoms of depression compared with participants in the control group (p = .015 and p = .002, respectively). The result for CBT had a small effect size (Cohen's d = 0.43), and the result for IPT had a medium effect size (Cohen's d = 0.73). From pre- to posttest and at 3-month follow-up, there were no significant differences in symptoms of depression between participants in the CBT and IPT groups. Participants in the control group were not included in the analyses of data from the 3-month follow-up because they were eligible to receive therapy.

In another study, adolescents were randomly assigned to one of four study conditions: the individual or group format of CBT or the individual or group format of IPT. From pre- to posttest, there were no significant differences in symptoms of depression between participants in the individual and group formats of CBT and between participants in the individual and group formats of IPT. However, from pre- to posttest, participants in both CBT formats had a reduction in symptoms of depression compared with participants in both IPT formats (p = .016).  

**Studies Measuring Outcome**

[Study 1, Study 2]

**Study Designs**

Experimental

**Quality of Research Rating**

3.6 (0.0-4.0 scale)

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### Outcome 2: Internalizing symptoms

**Description of Measures**

Internalizing symptoms were assessed using the Child Behavior Checklist (CBCL). The CBCL is a self-report instrument that measures the social abilities and behavioral problems of children and adolescents through two broad groupings of symptoms: internalizing problems (e.g., being withdrawn, having somatic complaints, feeling anxious/depressed) and externalizing problems (e.g., exhibiting delinquent and aggressive behaviors). Research staff administered the CBCL in Spanish.

**Key Findings**

Adolescents were randomly assigned to one of four study conditions: the individual or group format of CBT or the individual or group format of IPT. From pre- to posttest, there were no significant differences in internalizing symptoms between participants in the individual and group formats of CBT and between participants in the individual and group formats of IPT. However, from pre- to posttest, participants in both CBT formats had a reduction in internalizing symptoms compared with participants in both IPT formats (p = .037).

**Studies Measuring Outcome**

[Study 2]
### Study Populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>13-17 (Adolescent)</td>
<td>54% Female 46% Male</td>
<td>100% Hispanic or Latino</td>
</tr>
<tr>
<td>Study 2</td>
<td>13-17 (Adolescent)</td>
<td>55% Female 45% Male</td>
<td>100% Hispanic or Latino</td>
</tr>
</tbody>
</table>

### Quality of Research

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

<table>
<thead>
<tr>
<th>Study Designs</th>
<th>Quality of Research Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.9 (0.0-4.0 scale)</td>
</tr>
</tbody>
</table>

### Outcome 3: Externalizing symptoms

**Description of Measures**

Externalizing symptoms were assessed using the CBCL, a self-report instrument that measures the social abilities and behavioral problems of children and adolescents through two broad groupings of symptoms: internalizing problems (e.g., being withdrawn, having somatic complaints, feeling anxious/depressed) and externalizing problems (e.g., exhibiting delinquent and aggressive behaviors). Research staff administered the CBCL in Spanish.

**Key Findings**

Adolescents were randomly assigned to one of four study conditions: the individual or group format of CBT or the individual or group format of IPT. From pre- to posttest, there were no significant differences in externalizing symptoms between participants in the individual and group formats of CBT and between participants in the individual and group formats of IPT. However, from pre- to posttest, participants in both CBT formats had a reduction in externalizing symptoms compared with participants in both IPT formats (p = .035).

### Outcome 4: Self-concept

**Description of Measures**

Self-concept was assessed using the Piers-Harris Children's Self-Concept Scale (PHCSCS), an 80-item, self-report instrument. The adolescent responds with "yes" or "no" to each item regarding what he or she likes or dislikes about himself or herself. Research staff administered the PHCSCS in Spanish.

**Key Findings**

Adolescents were randomly assigned to one of four study conditions: the individual or group format of CBT or the individual or group format of IPT. From pre- to posttest, there were no significant differences in self-concept between participants in the individual and group formats of CBT and between participants in the individual and group formats of IPT. However, from pre- to posttest, participants in both CBT formats had an improvement in self-concept compared with participants in both IPT formats (p = .006).
Study 1

Study 2

Supplementary Materials


Quality of Research Ratings by Criteria (0.0-4.0 scale)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Reliability of Measures</th>
<th>Validity of Measures</th>
<th>Fidelity</th>
<th>Missing Data/Attrition</th>
<th>Confounding Variables</th>
<th>Data Analysis</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Symptoms of depression</td>
<td>3.8</td>
<td>3.8</td>
<td>3.9</td>
<td>3.3</td>
<td>3.3</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>2: Internalizing symptoms</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
<td>3.6</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>3: Externalizing symptoms</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
<td>3.6</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>4: Self-concept</td>
<td>4.0</td>
<td>3.5</td>
<td>4.0</td>
<td>3.9</td>
<td>3.6</td>
<td>3.9</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Study Strengths
The instruments used to measure change in key outcomes were well researched and had good to excellent psychometric properties. Both studies used multiple methods (e.g., treatment manuals, clinical adherence measure, training, videotaped sessions, weekly supervision) in an effort to ensure intervention fidelity. One study had very low attrition and included an intent-to-treat approach, which conservatively included all participants in the change analyses. Both studies randomly assigned adolescents to treatment conditions and used appropriate statistical analyses.

Study Weaknesses
One study had high noncompletion rates as well as high attrition at the 3-month follow-up. In the other study, the difference in treatment fidelity levels across the IPT and CBT treatment conditions (78.2% and 88.2%, respectively) is a confounding variable; that is, the difference in fidelity findings also may have contributed to differences in the outcome findings. Both studies had relatively small sample sizes.

Readiness for Dissemination
The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

Dissemination Materials
Clinical Adherence Measure


Training PowerPoint slides:

- Activities Module
- Case One
- Case Two
- CBT Theory
- Challenge in CBT
- Interpersonal Module
- Management of Suicide Risk
- Thought Module

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

<table>
<thead>
<tr>
<th>Implementation Materials</th>
<th>Training and Support</th>
<th>Quality Assurance</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8</td>
<td>2.3</td>
<td>1.8</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Dissemination Strengths

The therapist's manuals are concise and provide detailed instructions on delivering the intervention. The participant's manual is appropriately tailored to the target population. The training content is thorough, including discussion of cultural competence, potential treatment obstacles, and family engagement. The training uses case presentations, lecture, role-playing, and supervised casework to build clinician proficiency in the intervention. Several outcome measurement tools and a clinical adherence measure are identified as resources to support quality assurance.

Dissemination Weaknesses

The group-format therapist's manual includes much of the same content as the individual-format manual, with few exercises and specific strategies for engaging group members with the content of the sessions. Training options are limited for clinicians seeking implementation guidance. Written materials and the training content provide little guidance for identifying intervention participants; administering outcome measurement tools and interpreting data; assessing and ensuring fidelity to the model; and understanding the requirements and purpose of clinical supervision, as well as using it as part of quality assurance. Implementers must acquire outcome measurement tools from outside sources. The adherence tool does not include quality indicators to support the measurement of clinician skill at delivering intervention components.

Costs

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Required by Program Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist's manual (group or individual format)</td>
<td>Free</td>
<td>Yes</td>
</tr>
<tr>
<td>Participant's manual</td>
<td>Free</td>
<td>Yes</td>
</tr>
<tr>
<td>2-month, off-site clinician training seminar in Puerto Rico (includes implementation and quality assurance materials)</td>
<td>$400 per participant</td>
<td>No</td>
</tr>
<tr>
<td>3-day, on-site training (includes implementation and quality assurance materials)</td>
<td>$3,500 per site, plus trainer travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>Phone and email technical assistance</td>
<td>Free</td>
<td>No</td>
</tr>
<tr>
<td>Ongoing consultation</td>
<td>Varies depending on site needs and location</td>
<td>No</td>
</tr>
</tbody>
</table>
Replications

Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.


Contacts

For information on implementation:

Yovanska Duarté-Vélez, Ph.D.
(787) 764-0000 ext 7186
ymduarte@ipsi.uprrp.edu

For information on research:

Guillermo Bernal, Ph.D.
(787) 764-0000 ext 4177
gbernal@ipsi.uprrp.edu

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