Evidence-Based Psychosocial Interventions for Ethnic Minority Youth: The 10-Year Update

Armando A. Pina, Antonio J. Polo & Stanley J. Huey


To link to this article: https://doi.org/10.1080/15374416.2019.1567350

Published online: 12 Feb 2019.

Submit your article to this journal

Article views: 137

View Crossmark data
Evidence-Based Psychosocial Interventions for Ethnic Minority Youth: The 10-Year Update

Armando A. Pina  
Department of Psychology, Arizona State University

Antonio J. Polo  
Department of Psychology, DePaul University

Stanley J. Huey  
University of Southern California

This is the official update on the status of evidence-based psychosocial interventions for ethnic minority youth. Compared to a decade ago, there has been expansion of well-designed intervention studies, growth in the number (not type) of interventions meeting evidence-based criteria, and greater focus on testing ethnicity/race moderator effects. In terms of standard of evidence, 4 psychosocial interventions are now well-established and 10 are probably efficacious or possibly efficacious, with most protocols drawing on cognitive and behavioral change procedures and/or family systems models. Yet the research literature remains mostly focused on testing interventions with European Americans (White Caucasians), and little to no progress has been made in testing the effects of interventions with Asian American or Native American youth. Knowledge of the effects of cultural tailoring on program engagement, outcomes, and mechanisms of change remains scant.

Population estimates show that ethnic minority youth comprise a significant and growing proportion of the population in the United States (Vespa, Armstrong, & Medina, 2018), with approximately 25.5% identifying as Hispanic/Latino (H/L), 15.2% as African American (AfA), 5.5%, as Asian American (AsA), and 1.6% as American Indian or Native Americans. Furthermore, Census Bureau projections indicate that 50.2% of the U.S. child population is non-European American (non-EuA) and that the proportion of children who are two or more races will more than double over the next decade (Projections Series for the United States, 2017–2060, Camarota, 2012). Of note, there is considerable heterogeneity within minority groups, typically emerging from factors such as immigration history, generational status, nationality, and religious background (Castro, Barrera, & Martinez, 2004). The AsA communities in the United States, for instance, are quite heterogeneous, with more than 20 nationalities (e.g., Chinese, Japanese, Filipino, Korean, Vietnamese, Laotian, Cambodian), each made unique by linguistic, cultural, and sociodemographic backgrounds and immigration histories (Lopez, Ruiz, & Patten, 2017). Despite significant diversity in the United States, the literature remains limited when it comes to the mental health of ethnic minority youth, even with theory and research highlighting that culture is amalgamated with development across the life span (Cicchetti, 1990; Garcia-Coll, Akerman, & Cicchetti, 2000). It is therefore unsurprising that cross-ethnic variations in risk factors, resilience resources, symptom presentation, diagnostic rates, service-seeking behaviors, and intervention-related outcomes have been found in the literature (Ginsburg & Silverman, 1996; Pina & Silverman, 2004; Rapp, Lau, & Chavira, 2017; Merikangas et al., 2010; Varela & Hensley-Maloney, 2009). For instance, Miller, Nigg, and Miller (2009) found that AfA youth have more attention deficit/hyperactivity disorder (ADHD) symptoms than EuA youth; yet, AfA youth are less likely to receive adequate ADHD treatment and
maintenance compared to EuA youth (Cummings, Ji, Allen, Lally, & Druss, 2017). As such, it is essential to periodically evaluate progress made toward reducing health disparities, including by identifying evidence-based psychosocial interventions for mental health problems among ethnic minority youth.

A decade ago, a seminal review and meta-analysis focusing on psychosocial treatments for mental health problems among ethnic minority youth was published by Huey and Polo (2008). The report largely focused on the classification of psychosocial interventions using criteria established by a Task Force on the Promotion and Dissemination of Psychological Procedures (Task Force on Promotion and Dissemination of Psychological Procedures, 1993), which had the explicit purpose of promoting the classification of treatments for disseminating interventions to practitioners, psychology training programs, consumers, and third-party payers. Huey and Polo (2008) also reported aggregate effect sizes but cautioned that methodological challenges in some contributing studies could have influenced program effect estimates. Across 35 randomized trials, they found that no treatment met the highest standard of evidence (i.e., well-established) but several treatment programs were identified as probably efficacious or possibly efficacious, with most drawing on cognitive behavioral therapy (CBT) and/or family therapy models. Caveats to the classification, and to the obtained effect sizes, included the fact that four studies did not meet the minimum sample size criteria of more than 12 participants per condition (i.e., Forman, 1980; Ginsburg & Drake, 2002; Huey & Rank, 1984; Wilson & Rotter, 1986), one study used archival data (DeAnda, 1985), and one study used measures with unknown reliability and validity (Stuart, Tripodi, Jayaratne, & Camburn, 1976). Furthermore, in 12 studies, it was not specified if post-intervention assessments were conducted by evaluators blinded to randomization or hypotheses (Block, 1978; Borduin et al., 1995; DeAnda, 1985; Forman, 1980; Garza & Bratton, 2005; Henggeler, Clingempeel, Brondino, & Pickrel, 2002; Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Henggeler, Melton, & Smith, 1992; Huey & Rank, 1984; Lochman, Coie, Underwood, & Terry, 1993; Schaeffer & Borduin, 2005; Stuart et al., 1976).

In the clinical child and adolescent literature, several evidence-based updates have been published since Huey and Polo (2008), albeit none focusing exclusively on psychosocial interventions for ethnic minority youth. Since the Huey and Polo report, Southam-Gerow and Prinstein (2014) published a set of improved criteria for the classification of treatments as evidence-based to emphasize the need for greater methodological rigor in determining the status of psychosocial interventions for children and adolescents. Table 1 shows the updated criteria, including Huey and Polo (2008) guidelines for selecting randomized controlled trials (RCTs) with meaningful ethnic minority inclusion. Using the improved criteria, McCart and Sheidow’s (2016) evaluation of the treatment literature found multisystemic therapy (MST; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009) and Treatment Foster Care Oregon (formerly Multidimensional Treatment Foster Care; Chamberlain, 2003) to be well-established for disruptive behavior problems. In Evans, Owens, and Bunford’s (2014) review, behavior management (i.e., behavioral parent training, behavioral classroom management, behavioral peer intervention, and their use in combination) and organization training were found to be well-established for ADHD. In terms of internalizing problems, Weersing, Jeffreys, Do, Schwartz, and Bolano (2017) found CBT and interpersonal psychotherapy (IPT) to be well-established for depression in adolescents (13 years of age and older). Last, in Higa-McMillan, Francis, Rith-Najarian, and Chorpita (2016), CBT (including with parent involvement and Sertraline) and behavior therapy (exposure, modeling) were found to be well-established for childhood anxiety. Given these findings and with the increasing and projected growth in ethnic minority youth, the time is ripe to reevaluate and update the status of psychosocial interventions for mental health problems in U.S. ethnic minority youth.

This evidence-based status update follows guidelines from the Society of Clinical Child and Adolescent Psychology for the review and evaluation of psychosocial interventions for ethnic minority youth. Next we report parameters used for the update (e.g., search terms, criteria for including a study) and Level of Support (well-established, probably efficacious, possibly efficacious, experimental, questionable) to evaluate each intervention tested in well-designed RCTs. Interventions corresponding to each level of support are named in the text and in a summary table. Also, following the guidelines from Society of Clinical Child and Adolescent Psychology, classification of each intervention program (format and type) are aggregated by approach (e.g., parent training, cognitive and behavioral) rather than “brand name” (e.g., Coping Power) when possible. Last, per the guidelines, this update reports on the state of the research on moderators and mediators for intervention approaches that met Level 1 or Level 2 (well-established, probably efficacious) criteria.

**Approach to Selecting Psychosocial Interventions**

The principal source for selecting each study for review and evaluation was a Web of Science search using these parameters: categories (psychology, psychiatry), topics (intervention, treatment, prevention, psychotherapy, training, modification), evaluation (clinical, randomized, comparison, effect, outcome), and population (e.g., child, youth, adolescent). The Web of Science search was supplemented with manual searches of studies included in meta-analyses, reviews, references in targeted studies citing other RCTs, and “in press” or “first online” studies recommended by the search engine. Studies were included for consideration if the mean age of participants was 18 years or younger. Formal psychiatric diagnosis was not required for inclusion because many trials with clinically impaired youth do not ascertain Diagnostic and Statistical
Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013) disorder status, clinic-referred and impaired youth do not always meet DSM-5 diagnostic criteria (Jensen & Weisz, 2002), and past published reviews of the empirical status of interventions included youth without a formal psychiatric diagnosis (e.g., Huey & Polo, 2008; Kaslow & Thompson, 1998; Ollendick & King, 1998). We included U.S.-based studies only and defined treatment as

### Table 1
Criteria for Study Selection and Evidence-Based Status

<table>
<thead>
<tr>
<th>Representation (R)</th>
<th>Design and Methods (M)</th>
<th>Evidence-Based Status Criteria (Levels 1–5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.1 Representation: At least 75% of participants were ethnic minorities, OR R.2 Effects: R.2a. Evaluated using subgroup analyses with the subset of ethnic minorities, OR R.2b. Evaluated whether ethnic minority status moderated the outcome(s)</td>
<td>M.1. Group design: Study involved a randomized controlled design M.2. Independent variable: Intervention was manualized or logical equivalent M.3. Population: Specified problems based on clearly delineated inclusion/exclusion criteria M.4. Dependent variable: Reliable and valid measures used to ascertain outcomes M.5. Analyses: Appropriate sample size and data analyses were used to detect reliable effects.</td>
<td>Well-Established (Level 1) Effects demonstrated on most primary outcome measures by showing:</td>
</tr>
<tr>
<td>Important Note: Relevant to R.1, Kazdin and Bass found that a sample size of 12 per condition, with treatment vs. no-treatment main effect comparisons, yielded large effects while intervention versus placebo main effect comparisons yielded small to medium effects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1a. Statistically significant superiority to pill or psychological placebo or another active intervention, OR 1.1b. Equivalent (or not significantly different) to an already well-established intervention, AND 1.1c. In at least two independent research settings and by two independent investigatory teams, AND 1.2. M.1 to M.5.</td>
<td>Probably Efficacious (Level 2) Effects demonstrated for the intervention by showing:</td>
<td></td>
</tr>
<tr>
<td>2.1. Statistically significant superiority to a waitlist or no intervention control, in at least two good experiments, OR 2.2. Well-Established criteria except for 1.1c AND 2.3. M.1 to M.5.</td>
<td>Possibly Efficacious (Level 3) Effects demonstrated for the intervention by showing:</td>
<td></td>
</tr>
<tr>
<td>3.1 Statistically significant superiority to a waitlist or no intervention control, in at least one experiment, AND 3.2. M.1 to M.5 OR 3.3. Statistically significant effects, in at least two clinical studies, with two or more studies meeting the last four of M.2 to M.5.</td>
<td>Experimental (Level 4) Effects demonstrated for the intervention by showing:</td>
<td></td>
</tr>
<tr>
<td>4.1. Statistically significant effects, but not tested in an experiment OR 4.2. Statistically significant effects in at least one experiment but not sufficient to meet Level 3 criteria.</td>
<td>Questionable (Level 5)</td>
<td></td>
</tr>
<tr>
<td>5.1. Inferiority to another intervention, waitlist, and/or control. OR 5.2. No beneficial effects.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“any intervention to alleviate psychological distress, reduce maladaptive behavior, or enhance adaptive behavior through counseling, structured or unstructured interaction, a training program, or a predetermined treatment plan” (Weisz, Weiss, Han, Granger, & Morton, 1995, p. 452).

The definition of treatment used herein is consistent with the Institute of Medicine’s (IOM’s; O’Connell, Boat, & Warner, 2009) indicated and selective levels of intervention. According to the IOM, indicated interventions are targeted to high-risk individuals who are identified as having minimal but detectable symptoms that foreshadow psychiatric disorders but who do not meet diagnostic criteria at the time of the intervention (IOM, p. xv). Further, the IOM defines selective interventions as those that target individuals or a subgroup of the population whose risk of disorder development is significantly higher than average. Risk groups may be identified based on biological, psychological, or social risk factors that are known to be associated with disorder (IOM, p. xviii). Thus, we included U.S.-based studies that report on indicated or selective interventions.

Like Huey and Polo (2008), we excluded studies of interventions involving medication only, teaching or tutoring aimed at increasing knowledge of a specific subject, relocation only (e.g., moving a child to a foster home or juvenile detention), and intervention efforts exclusively intended for universal prevention purposes. Also excluded were studies of interventions focusing primarily on reading ability, learning disabilities, academic concerns, peer rejection or unpopularity, “medical” problems (e.g., distress associated with a pediatric medical care, migraines), and medication adherence (e.g., maintenance of glycemic medication for pediatric diabetes).

Evidence-Based Psychosocial Interventions for Ethnic Minority Youth

We reevaluated each study in the initial report by Huey and Polo (2008) in addition to evaluating studies published from 2007 to 2018. Our search resulted in 65 studies meeting inclusion/exclusion criteria (30 were in Huey & Polo, 2008; 35 are new to this update). Unlike Huey and Polo (2008), we excluded DeAnda (1985) and Stuart et al. (1976) because archival data were used in the first and measures with unknown reliability and validity were used in the second study. Each of the 65 studies was published in a peer-reviewed scientific journal, and impact factors across journals averaged 3.79 (SD = 1.55). Every study specified the percentage of enrolled ethnic minority youth, although two did not specify percentages for each distinct minority group (Block, 1978; Rowland et al., 2005). The 65 studies are summarized in Table 2. The first column identifies the investigatory team (authors) and publication date. The second column reports participant characteristics (e.g., age, sex, ethnicity, clinical inclusion criteria) and randomization to condition and comparator. The third column describes significant findings. Last, the fourth column specifies Table 1 criteria relevant to representativeness and methodological robustness (R and M criteria) for each study, after two independent and trained raters reached 100% agreement. In terms of the R.1 classification (at least 75% minority representation), 27 studies met the representation criterion with H/Ls, 19 studies with AfAs, and one study with AsA youths. Eighteen studies met the representation criterion with multiethnic youth. Of the 65 studies meeting the R.1 criterion, 22 studies reported 100% representation from a single ethnic minority group (14 H/L, 7 AfA, 1 AsA). In terms of the R.2 classification (data analyses), seven studies met the R.2a criterion based on subgroup analyses with a subset of ethnic minorities (e.g., four H/L, two AfA), and 16 met the R.2b criterion from having evaluated whether ethnic minority status moderated the outcome(s) (e.g., seven AfA, five H/L). There were no studies with any meaningful representation of Native American youth. A total of 56 studies met all M.1 to M.5 criteria. Seven studies did not meet the M.5 criterion (Chavira et al., 2018; Forman, 1980; Fung, Guo, Jin, Bear, & Lau, 2016; Ginsburg & Drake, 2002; Huey & Rank, 1984; Rowland et al., 2005; Wilson & Rotter, 1986) because the sample size per condition/comparator was small (these studies were pilots). Twenty-eight studies tested interventions among youth who met DSM-5 diagnostic criteria; the remaining studies tested interventions for at-risk youth or youth showing DSM-5 symptoms or clinical symptom elevations on rating scales (e.g., Pina, Zerr, Villalta, & Gonzales, 2012; Rosselló, Bernal, & Rivera-Medina, 2008). We found no RCTs focused on bipolar spectrum disorders, illegal sexual behavior, elimination disorders, tic disorders, or eating disorders that also met our R.1 criterion, despite the existence of evidence-based psychosocial interventions for these conditions among EuA youth (e.g., Dopp, Borduin, Rothman, & Letourneau, 2017; Fristad & MacPherson, 2014; Lock, 2015; Shepard, Poler, & Grabman, 2017; Woods & Houghton, 2016).

In terms of the evidence-based status of psychosocial interventions, cognitive and behavioral interventions are well-established for anxiety in H/L children (Table 3), with the caveat that when no consideration is given to cultural-contextual factors in the intervention then positive program response may be compromised (see Taylor et al., 2018; Table 2, row 4). For disruptiveness among AfA adolescents, MST is well-established; for H/L children and adolescents with disruptive problems, family-based interventions are well-established; and for H/L with substance use problems, family-based interventions are well-established. There are no other well-established psychosocial interventions for mental health problems among ethnic minority youth. As shown in Table 3, several interventions met the probably efficacious criteria. For depression in H/L adolescents, interpersonal approaches are probably efficacious; for trauma-stress reactions in AfA youth, peer resilient treatment is probably efficacious. In addition, there were several possibly efficacious or experimental interventions for ethnic minority youth, mostly variants of CBT, family therapy, and parenting programs. One study evaluated a mindfulness-based
### TABLE 2
Randomized Controlled Studies Contributing to the Evidence-Based Status of Psychosocial Interventions Delivered to Ethnic Minority Youth

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anxiety (n = 7)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilson and Rotter (1986) [1]</td>
<td>N = 54. 6th to 7th graders. Age range and mean age not reported. 44% girls. 89% AfA, 11% EuA. High TASC test anxiety. Randomized to AMT, SST, M-AMT, attention control or no-contact control.</td>
<td>At posttest and FU, AMT, M-AMT, and SST led to lower TASC test anxiety than controls. AMT, M-AMT, and SST did not differ from one another. Controls did not differ from one another.</td>
<td>R.1 [AfA] M.1 to M.4</td>
</tr>
<tr>
<td>Silverman et al. (1999) [2]</td>
<td>N = 56. Ages 6–16 years (M = 10.0). 33% girls. 47% EuA, 46% H/L, 7% other. DSM SoP, overanxious disorder or GAD. Randomized to GCBT or waitlist.</td>
<td>At posttest, GCBT led to lower RCMAS and RCMAS-P anxiety, and clinician and parent ADIS-C/P clinical severity than waitlist. There were more cross-ethnic similarities than differences and equivalence between EuA and H/L youth (Pina, Silverman, Fuentes, Kurtines, &amp; Weems, 2003) at posttest and FU.</td>
<td>R.2a [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Ginsburg and Drake (2002) [3]</td>
<td>N = 12. Ages 14 to 17 years (M = 15.6). 83% girls. 100% AfA. DSM GAD, specific phobia, SoP. Randomized to GCBT or attention control.</td>
<td>At posttest, GCBT led to lower ADIS-C/P severity and SCARED anxiety than control.</td>
<td>R.1 [AfA] M.1 to M.4</td>
</tr>
<tr>
<td>Walkup et al. (2008) [4]</td>
<td>N = 488. Ages 7–12 years (M = 10.7 years). 50% girls. 79% EuA, 9% AfA, 12% H/L. DSM SoP, GAD, SAD. Randomized to sertraline, ICBT, ICBT plus sertraline, or pill placebo.</td>
<td>At posttest, H/L ethnicity predicted higher anxiety after CBT and higher parent-rated anxiety after sertraline. In H/L youths with severe PARS anxiety, combination treatment increased remission whereas CBT and sertraline did not significantly increase remission relative to placebo (Taylor et al., 2018).</td>
<td>R.2a [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Pina et al. (2012) [5]</td>
<td>N = 88. Ages 8–17 years (M = 10.4). 51% girls. 41% EuA, 59% H/L. DSM anxiety symptoms (no diagnosis), SAD, GAD, SoP, or specific phobias. Randomized to CBT with minimal versus moderate caregiver involvement.</td>
<td>At posttest and FU, both CBTs lowered CBCL internalizing, ADIS-C/P anxiety, and ADIS: C/P CRS. CBT with moderate parent involvement led to lower RCMAS anxiety and CDI depression than CBT with minimal parent involvement. There were no ethnicity or language (Spanish) moderation effects.</td>
<td>R.2b [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Chavira et al. (2018) [6]</td>
<td>N = 31. Ages 8–13 years (M = 11.0). 94% girls. 100% H/L. DSM specific phobia, SAD, GAD, or SoP. Randomized to randomized to one of two parent-mediated CBT bibliotherapy modalities: (a) telephone-delivered, TTB or (b) minimal contact, SB.</td>
<td>At posttest, ADIS: C/P CRS recovery rates were 50% in TTB and 36% for SB. ADIS: C/P diagnostic recovery rates were 61.5% TTB and 36.4% for SB. Rates were not statistically significantly different.</td>
<td>R.1 [H/L] M.1 to M.4</td>
</tr>
<tr>
<td>Pina et al. (in press) [7]</td>
<td>N = 109. M = 9.6years. 78% girls. 54% H/L, 36% EuA, 4% Native American, 3% AfA, 3% other. SCAS ≥ 42 anxiety symptoms. Randomized to CBT plus social skills training or active control.</td>
<td>At FU, CBT led to greater improvements in SEQSS self-efficacy for managing anxiety, lower CNCEQ cognitive interpretation biases, and greater SSIS-RS social competence than control. Ethnicity moderated the effect of CBT on caregiver-reported anxiety about the child at FU using the SCAS anxiety, such that parents of H/L youth in the control reported fewer anxiety levels than parents of H/L youth in CBT.</td>
<td>R.2b [H/L] M.1 to M.5</td>
</tr>
<tr>
<td><strong>Depression (n = 10)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosselló and Bernal (1999) [8]</td>
<td>N = 71. Ages 13 to 17 years (M = 14.7). 54% girls. 100% H/L Puerto Rican. DSM depression and/or dysthymia. Randomized to ICBT, IPT, or waitlist.</td>
<td>At posttest and FU, CBT and IPT led to lower CDI depression than waitlist. ICBT and IPT did not differ.</td>
<td>R.1 [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Rosselló et al. (2008) [9]</td>
<td>N = 112. Ages 12–18 years (M = 14.5). 55% girls. 100% H/L. DSM depression or CDI ≥ 13. Randomized to ICBT, GCBT, group IPT, or individual IPT.</td>
<td>At posttest, CBT (ICBT and GCBT) led to lower CDI depression than IPT (individual IPT and group IPT).</td>
<td>R.1 [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Ngo et al. (2009) [10]</td>
<td>N = 325. Ages 13 to 21 years (M = 17.2). 78% girls. 18% AfA, 69% H/L, 13% EuA. DSM depression or dysthymia symptoms and CES-D &gt; 16, or CES-D ≥ 24. Randomized to YPC: involving CBT, medication, combined CBT and medication, care management follow-up, and referral) or usual care.</td>
<td>At posttest, YPC led to lower CES-D depression for AfA youth compared to usual care. No clinical differences were found for H/L or EuA youth.</td>
<td>R.1 [ME] R.2a [AfA] M.1 to M.5</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young, Mufson, and</td>
<td>N = 57. Ages 13 to 17 (M = 14.5 years. 59.7% girls, 74 H/L, 26% AFA, DSM depression symptoms (no diagnosis). Randomized to IPT-AST or school counseling.</td>
<td>At posttest, IPT-AST led to lower CES-D and CDRS-R depression and greater CGAS functioning than school counseling. At FU, IPT-AST gains on CES-D depression and CGAS functioning were maintained.</td>
<td>R.1 [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Gallop (2010)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gunlicks-Stoessel and</td>
<td>N = 63. Ages 12–18 years (M = 14.7). 84% girls. 75% H/L, 14% AFA, 9% other, 2% AsA. HRSD &gt; 10, CGAS &lt; 65, and DSM depression, dysthymia, depressive disorder–NOS, or adjustment disorder with depressed mood. Randomized to IPT or usual care.</td>
<td>At posttest and FU, IPT led to lower HRSD depression than usual care.</td>
<td>R.1 [H/L] M.1 to M.5</td>
</tr>
<tr>
<td>Mufson (2011)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duong et al. (2016)</td>
<td>N = 120. Age range not reported (mean ages reported by condition) 7th and 8th graders. 60% girls. 55% EuA, 17% AsA, 10% Native American, 8% multiracial, 7% AFA, 5% Native Hawaiian/Pacific Islander. MFQ &gt; 14 on depression. Randomized to PTA (Mage = 12.8) or individual support (Mage = 12.7).</td>
<td>At posttest, both PTA and individual support led to lower MFQ and PHQ-9 depression. At FU, program effects on depression were maintained across conditions. There were no differences between conditions.</td>
<td>R.1 [ME] M.1 to M.5</td>
</tr>
<tr>
<td>Fung et al. (2016)</td>
<td>N = 19. Ages 12 to 14 years (M = 13.3). 68% girls. 58% H/L. 42% AsA. PHQ-9 mood symptoms (top 20%). Randomized to mindfulness or waitlist control.</td>
<td>At posttest, mindfulness led to lower CBCL externalizing behavior than control. Pooled data showed that mindfulness was related to lower CBCL externalizing, YSR internalizing problems, and ERQ-CA expressive suppression.</td>
<td>R.1 [ME] M.1 to M.4</td>
</tr>
<tr>
<td>Thompson, Sugar,</td>
<td>N = 134. Ages 7–14 years (M = 10.8). 56% girls. 51% EuA, 26% AFA, 15% H/L, 8% other. DSM depression, dysthymia, or depressive disorder–NOS. Randomized to FFT-CD or ISP.</td>
<td>At posttest, FFT-CD led to lower CDI and CDRS-R depression, lower MASC anxiety, lower CBCL nondepressive symptoms, and greater gains in CGAS and SAS-SR functioning/social adjustment than ISP. FFT-CD led to lower remission rates than ISP. There were no ethnicity moderation effects.</td>
<td>R.2b [ME] M.1 to M.5</td>
</tr>
<tr>
<td>Langer, and Asarnow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2017)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGlinchey, Reyes-</td>
<td>N = 63. Ages 12–18 years (M = 15.1). 84% girls. 71% H/L. 29% ethnicity not reported. DSM depression. Randomized to IPT or usual care.</td>
<td>At posttest, mindfulness led to greater reductions in YSR internalizing problems, PSS perceived stress, and CRSQ rumination than waitlist. Mindfulness led to increases in ERQC cognitive reappraisal, emotional processing, emotional and expression than waitlist. At FU, the effects of mindfulness were maintained across all measures. For AsA youth only, mindfulness led to greater reductions in YSR attention compared to H/L at FU. Heritage language use did not moderate program effects.</td>
<td>R.1, R.2b [ME] M.1 to M.5</td>
</tr>
<tr>
<td>Portillo, Turner, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mufson (2017)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fung et al. (2018)</td>
<td>N = 145. Ages 13–15 years (M = 13.99). 38% girls. 43% AsA, 43 H/L, 3% EuA, 2% AFA, 6% mixed. Top 20% depression on the SMFQ. Randomized to mindfulness or waitlist control.</td>
<td>At posttest, mindfulness led to greater reductions in YSR internalizing problems, PSS perceived stress, and CRSQ rumination than waitlist. Mindfulness led to increases in ERQC cognitive reappraisal, emotional processing, emotional and expression than waitlist. At FU, the effects of mindfulness were maintained across all measures. For AsA youth only, mindfulness led to greater reductions in YSR attention compared to H/L at FU. Heritage language use did not moderate program effects.</td>
<td>R.1, R.2b [ME] M.1 to M.5</td>
</tr>
<tr>
<td>Disruptiveness, Anger,</td>
<td>N = 40. Age range not reported (11th and 12th graders) (M = 16.1 years). 52% girls. AFA or H/L (% not reported). Office referrals and school staff nominated for disruptive behavior. Randomized to REE, human relations training, or control.</td>
<td>At posttest and FU, REE led to less teacher-rated disruptive behavior and class cutting than human relations training or control.</td>
<td>R.1 [ME] M.1 to M.5</td>
</tr>
<tr>
<td>and Aggression (n = 26)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block (1978)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forman (1980)</td>
<td>N = 18. Ages 8–11 years. Mean age not reported. 22% girls. 89% AFA, 11% EuA. Referred for aggressiveness. Randomized to cognitive restructuring, response cost, or attention control.</td>
<td>At posttest, cognitive restructuring led to fewer SCAN inappropriate interactions than response cost or control. Response cost led to less DESBRS aggression and classroom disturbance than cognitive restructuring or control.</td>
<td>R.1 [AFA] M.1 to M.4</td>
</tr>
<tr>
<td>Study</td>
<td>N</td>
<td>Age Range and Mean Age</td>
<td>Gender Distribution (%)</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------</td>
<td>------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Huey and Rank (1984)</td>
<td>48</td>
<td>Age not reported</td>
<td>0% girls</td>
</tr>
<tr>
<td>Szapecznik et al. (1989)</td>
<td>79</td>
<td>Ages 6 to 12 years</td>
<td>29% girls</td>
</tr>
<tr>
<td>Henggeler et al. (1992)</td>
<td>84</td>
<td>Age not reported</td>
<td>23% girls</td>
</tr>
<tr>
<td>Lochman et al. (1993)</td>
<td>52</td>
<td>Age not reported</td>
<td>48% girls</td>
</tr>
<tr>
<td>Hudley and Graham (1993)</td>
<td>72</td>
<td>Ages 10 to 12 years</td>
<td>0% girls</td>
</tr>
<tr>
<td>Borduin et al. (1995)</td>
<td>176</td>
<td>Ages 12 to 17 years</td>
<td>32% girls</td>
</tr>
<tr>
<td>Henggeler et al. (1997)</td>
<td>155</td>
<td>Ages 10 to 18 years</td>
<td>18% girls</td>
</tr>
<tr>
<td>Snyder, Kymissis, and Kessler (1999)</td>
<td>50</td>
<td>Age range and mean age not reported</td>
<td>44% girls</td>
</tr>
<tr>
<td>MTA Cooperative Group (1999)</td>
<td>579</td>
<td>Ages 7-10 years</td>
<td>20% girls</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lochman and Wells (2002) [29]</td>
<td>N = 213. Age range and Mean age not reported (5th graders). 40% girls. 78% AfA, 22% Other. TOCA-R upper 31% in aggression/disruptiveness. Randomized to Coping Power plus parent, Coping Power plus parent + universal curriculum, universal curriculum only, or control.</td>
<td>At FU, both Coping Power conditions led to lower NYS delinquency than control. Coping Power plus parent + universal curriculum led to lower TOCA-R aggression than control. Universal curriculum and control did not differ. There were no differences between Coping Power conditions (Lochman &amp; Wells, 2003). There were no ethnicity moderation effects.</td>
<td>R.1, R.2b; M.1 to M.5</td>
</tr>
<tr>
<td>Hogue, Liddle, Becker, and Johnson-Leckrone (2002) [30]</td>
<td>N = 124. Ages 11 to 14 years (M = 12.5). 97% AfA, 2% other and 1% H/L. Endorsement of at least one of the following: school truancy, failing grades, frequent alcohol or marijuana use (self or friends), history of major delinquent acts. Randomized to MDFF or control.</td>
<td>At posttest, MDFF led to lower CBCL internalizing problems and greater SPPA global self-competence and school bonding than control. MDFF led to less peer antisocial behavior than control.</td>
<td>R.1 [AfA]; M.1 to M.5</td>
</tr>
<tr>
<td>Santisteban et al. (2003) [31]</td>
<td>N = 126. Ages 12–18 years (M = 15.6). 25% girls. 100% H/L. 94% in the RBPC clinical range for conduct problems. Randomized to BFST or active control.</td>
<td>At posttest, BSFT led to less RBPC conduct disorder and socialized aggression than control.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>Lochman and Wells (2004) [32]</td>
<td>N = 183. Ages 10–11 years (mean age not reported). 0% girls. 61% AfA, 38% EuA, 1% other. TRF ≥ 60 plus upper 22% in aggression/disruptiveness. Randomized to Coping Power, Coping Power plus parent, or usual care.</td>
<td>At FU, both Coping Power conditions led to lower NYS covert delinquency than usual care. Parental involvement did not enhance program effects. Coping Power led to improvements in school behavior for EuA youth only; not for AfA youth.</td>
<td>R.2a [AfA]; M.1 to M.5</td>
</tr>
<tr>
<td>Garza and Bratton (2005) [33]</td>
<td>N = 29. Ages 5–11 years (mean age not reported). 43% girls. 100% H/L. BASC scores in the borderline or clinically range. Randomized to child-centered play therapy or group counseling.</td>
<td>At posttest, child-centered play therapy led to fewer BASC externalizing problems than group counseling.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>Cabiya et al. (2008) [34]</td>
<td>N = 174. Ages 8–13 (M = 10.6). 29% girls. 100% H/L. DSM ADHD, ODD or CD. Randomized to GCBT or waitlist.</td>
<td>At posttest, GCBT led to less BSBI activity/impulsivity, distractibility/low motivation CDI depression, and BSBI irritability/hostility than control.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>McCabe and Yeh (2009) [35]</td>
<td>N = 58. Ages 3–7 years (M = 4.4). 30% girls. 100% H/L. Above the ECBI clinical cutoff for Intensity. Randomized to PCIT, adapted PCIT (GANA), or usual care.</td>
<td>At posttest, GANA and PCIT led to fewer CBCL externalizing, ODD, CD, and ADHD symptoms and Parenting Stress Index levels than usual care. GANA and PCIT led to DPICS gains in caregiver praise, reflection of child speech, and description of child behaviors compared to usual care. GANA and PCIT also led to greater reductions in questions, commands, and criticisms of child-led play, parent-led play, and clean-up situations than usual care. GANA and PCIT did not differ on any principal outcome. At FU, PCIT was no different from usual care and GANA outperformed PCIT on CBCL internalizing problems. Parental locus of control improved more in GANA than in usual care (McCabe, Yeh, Lau, &amp; Argote, 2012). Family functioning mediated program effects on substance use.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>Pantin et al. (2009) [36]</td>
<td>N = 213. Age range not reported, (8th graders) (M = 13.8). 34% girls. 100% H/L. Mild problems on at least one RBPC subscale: conduct disorder, socialized aggression, and attention problems. Randomized to Familias Unidas or control.</td>
<td>At posttest and FU, Familias Unidas led to less illegal substance use based on items from the Monitory the Future epidemiological study, DISC lower disruptive disorder incidence, SIB greater condom use for sexually active youth, and better PPS family functioning than control. Family functioning mediated program effects on substance use.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>Matos, Bauermeister, and Bernal (2009) [37]</td>
<td>N = 32. Ages 4–6 years (mean age not reported). 100% H/L. DSM ADHD and significant behavior problems. Randomized to PCIT or waitlist.</td>
<td>At posttest, PCIT led to less BASC-hyperactivity, aggression, DBRS hyperactivity and ODD, and ECBI-IS than waitlist. PCIT led to less FEI parenting stress and DBRS inattention that waitlist. PPI parenting practices improved in PCIT but not waitlist.</td>
<td>R.1 [H/L]; M.1 to M.5</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Characteristics</td>
<td>Interventions</td>
<td>Outcomes</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Lau et al. (2011) [38]</td>
<td>( N = 54 ), Ages 5–12 years (( M = 8.4 )), 38% girls, 100% AsA. Referred for concerns about parental discipline or child behavior problems. Randomized to parent training or waitlist.</td>
<td>At posttest, parent training led to less APQ negative discipline, gains in positive parenting, and fewer CBCL externalizing and internalizing problems than waitlist. Changes in negative discipline mediated the effects of parent training on externalizing behaviors. At FU, youth with higher levels of baseline behavior problems and lower levels of parenting stress showed the greatest benefits.</td>
<td>( R.1 ) [AsA] ( M.1 ) to 5</td>
</tr>
<tr>
<td>Shapiro, Youngstrom, Youngstrom, and Marcinick (2012) [39]</td>
<td>( N = 194 ), Ages 3–9 years (( M = 6.2 )), 27% girls, 60% AfA, 25% EuA, 10% biracial, and 5% H/L. Referred for disruptive behaviors. Randomized to Helping the Noncompliant Child or usual care.</td>
<td>At posttest, there were no differences between conditions on any outcome. No ethnicity by intervention effects were found.</td>
<td>( R.1 ) [ME] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Bratton et al. (2013) [40]</td>
<td>( N = 54 ), Ages 3–4 years (( M ) age not reported), 34% girls, 42% AfA, 39% H/L, 19 EuA. TRF borderline or clinical levels of disruptive behaviors. Randomized to child centered play therapy or active control.</td>
<td>At posttest, child centered play therapy led to fewer TRF disruptive behavior problems in the classroom and less inattention than control.</td>
<td>( R.1 ) [ME] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Chacko et al. (2015) [41]</td>
<td>( N = 320 ), Ages 7–11 years (( M = 8.9 )), 32% girls, 51% H/L, 31% AfA, 8% EuA, 3% Native American, 7% other. DSM ODD or CD. Randomized to MFG or usual care.</td>
<td>At posttest, MFG led to less IOWA CRS oppositional and defiant behavior and gains in SSRS social skills than usual care.</td>
<td>( R.1 ) [ME] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Parra-Cardona et al. (2017) [42]</td>
<td>( N = 103 ), Ages 4 to 12 years (( M ) age reported per condition), 46% girls, 100% H/L. DSM mild to moderate levels of antisocial behavior. Randomized to PMTO culturally adapted (( M_{age} = 9.4 )), PMTO culturally adapted and enhanced (( M_{age} = 8.7 )), or waitlist control (( M_{age} = 9.2 )).</td>
<td>At FU, both PMTOs led to greater improvements in parenting skills (mother and father) than control PMTO culturally adapted and enhanced led to lower CBCL internalizing problems (mother and father) than control. Based on father CBCL externalizing only, PMTO culturally adapted and enhanced led to lower posttest and FU scores than control.</td>
<td>( R.1 ) [H/L] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Santisteban, Czaja, Nair, Mena, and Tulloch (2017) [43]</td>
<td>( N = 88 ), Ages 12–15 years old (( M = 13.6 )), 44% girls, 80% H/L, 20% AfA. DSM depression, CD or high family conflict. Randomized to immediate CIFFTA or delayed CIFFTA.</td>
<td>At posttest, immediate CIFFTA led to fewer RBPC conduct problems, less socialized aggression, fewer YSR externalizing problems, and greater gains in parent-adolescent FES family cohesion than delayed CIFFTA.</td>
<td>( R.1 ) [H/L] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Enggeler et al. (1999) [44]</td>
<td>( N = 118 ), Ages 12–17 years (( M = 15.7 )), 21% girls, 50% AfA, 47% EuA, 1% AsA, 1% H/L, 1% Native American Indian. DSM substance abuse/dependence. Randomized to MST or usual care.</td>
<td>At posttest, MST led to lower alcohol/marijuana and other drug use than usual care. At FU, MST led to fewer aggressive crimes based on SRDS and records MST also led to greater gains in marijuana abstinence than usual care (based on urine tests; Henggeler et al., 2002). There were no ethnicity moderation effects.</td>
<td>( R.2b ) [ME] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Liddle, Rowe, Dakof, Ungaro, and Henderson (2004) [45]</td>
<td>( N = 80 ), Ages 11–15 years (( M = 13.7 )), 27% girls, 42% H/L, 38% AfA, 11% H/L (Haitian or Jamaican), 3% EuA, 4% Other and 2% ethnicity not reported. Referred for substance use problems. Randomized to multidimensional family therapy or peer group therapy.</td>
<td>At posttest, multidimensional family therapy led to fewer YSR externalizing problems, National Youth Survey PDS peer delinquency association, and disruptive classroom behaviors, and more gains in FES family cohesion than peer group therapy. Multidimensional family therapy led to less marijuana and alcohol use than peer group therapy based on timeline follow back method. At FU, MDFT led to lower substance use, delinquency (based on records), GAIN internalized distress, and home/school/peer risk (based on interviews and records) than peer group intervention (Liddle, Rowe, Dakof, Henderson, &amp; Greenbaum, 2009).</td>
<td>( R.1 ) [ME] ( M.1 ) to M.5</td>
</tr>
<tr>
<td>Slesnick and Prestopnik (2009) [46]</td>
<td>( N = 119 ), Ages 12–17 years (( M = 15.1 )), 56% girls, 44% H/L, 29% EuA, 6% AfA, 21% (Native American, Other]. Runaways using illegal substances (89% DSM alcohol use disorder). Randomized to ecologically based family therapy, functional family therapy, or usual care.</td>
<td>At FU, both family therapies led to less alcohol and drug use than usual care. There were no differences between family therapy modalities. There were no H/L ethnicity moderation effects.</td>
<td>( R.2b ) [H/L] ( M.1 ) to M.5</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robbins et al. (2011)</td>
<td>N = 481. Ages 13–17 years (mean age not reported). 21% girls, 31% EuA, 23% AfA, 44% H/L, 2% ethnicity not reported. Referred for illegal substance use (73% DSM substance use disorder). Randomized to BSFT or usual care.</td>
<td>At FU, BSFT led to improvements in PPQ and FES family functioning than usual care. BSFT led to greater reductions in days of TLFB self-reported drug use than usual care. There were no ethnicity moderation effects.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Santisteban, Mena, and McCabe (2011)</td>
<td>N = 28. Ages 14–17 years (mean age not reported). Sex not reported. 100% H/L. DSM substance abuse disorder. Randomized to CIFFTA or traditional family therapy.</td>
<td>At posttest, CIFFTA led to less drug use (timeline follow-back for marijuana and cocaine with urinalysis confirmation) and more gains in adolescent reported PPQ parenting practices (positive parenting, involvement) than traditional family therapy.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Henggeler, McCart, Cunningham, and Chapman (2012)</td>
<td>N = 104. Ages 12–17 years (M = 15.4). 17% girls, 57% EuA, 40% AfA, 3% biracial. DSM substance use. Randomized to contingency management plus family engagement or usual care.</td>
<td>At FU, contingency management led to less marijuana use, crimes against persons, and property offenses than usual care. There were no ethnicity moderation effects.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Slesnick, Erdem, Bartle-Haring, and Brigham (2013)</td>
<td>N = 179. Ages 12–17 years (M = 15.4). 53% girls, 66% AfA, 26% EuA, 8% Others. DSM substance use. Randomized to ecologically based family therapy, community reinforcement, or motivational interviewing.</td>
<td>At FU, compared to family therapy, motivational interviewing led to greater declines in drug use and faster relapse, based on C-DISC and Form 90 Substance Use Interview. There were no other significant differences between conditions. Overall, minority youth relapsed sooner than EuA youth.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Burrow-Sánchez et al. (2015)</td>
<td>N = 70. Ages 13–18 years (M = 15.2). 10% girls, 100% H/L. Juvenile justice system. Randomized to S-CBT or A-CBT.</td>
<td>At posttest and FU, CBT led to less TLFB substance use (number of days). H/L with lower MEIM identity commitment in S-CBT had fewer days of substance use followed by those with higher commitment in A-CBT. H/L adolescents in S-CBT and with lower MEIM identity exploration had fewer days of substance use followed by those with higher exploration in A-CBT. H/L in S-CBT and with parents who had lower FS familism had the lowest number of days of substance use followed by those with higher parental familism in A-CBT.</td>
<td>M.1 to M.5</td>
</tr>
</tbody>
</table>

**Trauma Stress Reactions (n = 8)**

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fantuzzo et al. (1996)</td>
<td>N = 46. Ages 4–5 years (M = 4.5). 59% girls. 100% AfA. Socially withdrawn relative to classmates, based on teacher SSRS ratings and IPPOCS classroom observation (22 abused or neglected). Randomized to RPT or attention control.</td>
<td>At posttest, RPT led to more IPPOCS interactive play, less solitary play, and greater SSRS self-control and interpersonal skills than control.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Clark et al. (1998)</td>
<td>N = 131. Ages 7–15 years (M age not reported). 40% girls, 62% EuA, 34% AfA, 2% H/L, 2% biracial. Abused/neglected youth experiencing emotional and behavioral disturbances, in state custody. Randomized to Fostering Individualized Assistance Program or usual foster care.</td>
<td>At FU, the assistance program led to lower CBCL externalizing behavior, greater gains in time in permanency setting (with caregivers), less runaway behavior, and fewer incarcerated days than usual foster care. There were no variations by ethnicity.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Cohen, Deblinger, Mannarino, and Steer (2004)</td>
<td>N = 229. Ages 8–14 years (M = 10.8). 7% girls, 60% EuA, 28% AfA, 4% H/L, 7% Biracial, 1% Other. DSM PTSD (sexual abuse). Randomized to TF-CBT or child-centered therapy.</td>
<td>TF-CBT led to fewer SADS PTSD reexperiencing, avoidance, and hypervigilance symptoms than child centered therapy. There were no ethnicity moderation effects.</td>
<td>M.1 to M.5</td>
</tr>
<tr>
<td>Stein et al. (2003)</td>
<td>N = 106. Age range not reported (M = 11.0). 35% girls, 100% H/L. CPSS PTSD symptoms (violence). Randomized to CBITS or control.</td>
<td>At posttest, CBITS led to fewer CPSS PTSD symptoms than control.</td>
<td>M.1 to M.5</td>
</tr>
</tbody>
</table>
Fantuzzo et al. (2005) \[56\]  
$N = 82$. Age range not reported. ($M = 4.4$). 50% girls. 100% AfA. Socially withdrawn relative to classmates, based on teacher IPPOCs observations (37 maltreated). Randomized to RPT or attention control. At posttest, RPT led to greater IPPOCs collaborative play and less solitary play than control. RPT led to more PIPPS play interaction, less play disruption, and less play disconnection than control. RPT led to greater gains in SSRS self-control and interpersonal skills than control.  
R.1 [AfA] M.1 to M.5

Jaycox et al. (2009) \[57\]  
$N = 76$. 6th and 7th grades. Age range not reported. ($M = 11.5$). 51% girls. 96% H/L, 3% AfA, 1% EuA. Exposed to violence (direct or witness). Randomized to Support for Students Exposed to Trauma (a modified version of CBITS or waitlist. At posttest, CBITS led to lower CDI depression than control. R.1 [H/L] M.1 to M.5

Salloum and Overstreet (2012) \[58\]  
$N = 70$. Ages 6 to 12 years ($M = 9.6$). 44.3% girls. 100% AfA. PTSD symptoms. Randomized to Grief and Trauma Intervention with Coping Skills plus Trauma Narrative Processing or Grief and Trauma Intervention–Coping skills. At posttest and FU, both conditions led to lower UCLA PTSD, lower MFQ-C depression, traumatic grief, global distress, and lower CBCL internalizing problems. R.1 [AfA] M.1 to M.5

Foa, McLean, Capaldi, and Rosenfield (2013) \[59\]  
$N = 61$. Ages 13–18 years ($M = 15.3$). 100% AfA. 18% EuA, 16% H/L, 3% biracial, 7% ethnicity not reported. DSM PTSD (sexual abuse). Randomized to prolonged exposure or supportive counseling. At posttest and FU, prolonged exposure led to lower CPSS-I PTSD symptom severity, greater K-SADS PTSD diagnostic recovery, and improvements in CGAS global functioning compared to supportive counseling. R.1 [ME] M.1 to M.5

Comorbid or Multidisorder ($n = 4$)  
Weiss, Harris, Catron, and Han (2003) \[60\]  
$N = 93$. 3rd graders (Age range not reported). ($M = 9.7$). 37% girls. 56% AfA, 38% EuA; 6% ethnicity not reported. TRF Total $\geq 1$ SD; clinical range internalizing and/or externalizing. Randomized school classrooms to RECAP or control. At FU, RECAP led to lower TRF, YSR, CBCL internalizing and/or externalizing behavior than control. There were no ethnicity moderation effects. R.2b [AfA] M.1 to M.5

Rowland et al. (2005) \[61\]  
$N = 31$. Age range not reported ($M = 14.5$). 42% girls. 84% multiracial (AsA, EuA, Pacific Islander), 10% EuA, 6% AsA/Pacific Islander. DSM mixed diagnoses. Randomized to MST or usual care. At posttest, MST led to lower YSR externalizing and internalizing problems, lower SRDS minor delinquency, and fewer days in out-of-home placement than usual care. R.1 [ME] M.1 to M.4

Martinez and Eddy (2005) \[62\]  
$N = 73$. Age range not reported ($M = 12.7$). 44% girls. 100% H/L. At risk for problem behaviors. Randomized to PMT or control. At posttest, PMT led to greater gains in general parenting, skill encouragement, and overall effective parenting than control. PMT led to lower CBCL aggression and externalizing problems, and lower likelihood of smoking and use of alcohol, marijuana, or other illicit drugs than control. U.S.-born caregivers showed fewer gains in appropriate discipline and skill encouragement than foreign U.S.-born. U.S.-born youth showed fewer decreases in depression than foreign U.S.-born. R.1, R.2a [H/L] M.1 to M.5

Chorpita et al. (2017) \[63\]  
$N = 138$. Ages 5–15 years ($M = 9.3$). 45% girls. 78%, H/L 10%, AfA, 8% ME, 4% EuA. DSM CD, depression, or anxiety disorders. Randomized to modular approach to therapy for children CBT or usual care. At posttest, CBT led to fewer BPC total, externalizing, and internalizing problems than usual care. About 60% of CBT youth showed significant clinical improvement on the SDQ compared to 37% in usual care. R.1 [H/L] M.1 to M.5

Self-Injurious and Suicidality ($n = 2$)  
Huey et al. (2004) \[64\]  
$N = 156$. Ages 10–17 years ($M = 12.9$). 35% girls. 65% AfA, 33% EuA, 1% other. Referred for emergency psychiatric hospitalization. Randomized to MST or emergency psychiatric hospitalization. At FU, MST led to fewer YRBS suicide attempts than hospitalization. Ethnicity moderated treatment effects; for AfA but not EuA youth, MST led to faster recovery than hospitalization. R.2b [AfA] M.1 to M.5

*Continued*
### TABLE 2

#### Study Sample Characteristics and Study Design Program Effects Criteria

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics and Study Design</th>
<th>Program Effects</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamond et al. (2010)</td>
<td>66. Ages 12–17 years (M = 15.1). 83% girls. 74% AFA and 36% ethnicity not reported. DSM depression, dysthymia, any anxiety, or disruptive disorders (ADHD, ODD, CD). SIQ-JR ≥ 31 and BDI-II ≥ 20. Randomized to ABFT or enhanced usual care.</td>
<td>At posttest and FU, ABFT led to less SIQ-JR and SS suicidal ideation than usual care. Both conditions led to reductions in depression.</td>
<td>R.1 [AfA] M.1 to M.5</td>
</tr>
</tbody>
</table>

**Note:** ABFT = attachment-based family therapy; A-CBT = culturally accommodated CBT; ADHD = attention deficit/hyperactivity disorder; ADIS-C/P = Anxiety Disorders Interview Schedule for DSM-IV; Child and Parent Version; ADIS-C/P CRS = Clinician Rating of Severity; AFA = African Americans; AMT = Anxiety Management Training; APQ = Alabama Parenting Questionnaire; AsA = Asian Americans; ATQ = Automatic Thoughts Questionnaire; BASC = Behavior Assessment System for Children; BASC-2 = Behavior Assessment System for Children—Second Addition; BDI-II = Beck Depression Inventory-II; BPC = Behavior Problem Checklist; BSBI = Behavioural School Behavior Inventory; BSFT = Brief Strategic Family Therapy; CBCL = Child Behavior Checklist; CBITS = Cognitive-Behavioral Intervention for Trauma in Schools; CD = conduct disorder; CDI = Children’s Depression Inventory; CDRS-R = Children’s Depression Rating Scale, Revised; CES-D = Center for Epidemiological Studies Depression Scale; CFSEI-3 = Culture Free Self-Esteem Inventories—Third Edition; CGAS = Children’s Global Assessment Scale; CIFFT = Computer Informed and Flexible Family-Based Treatment; CNCEQ = Children’s Negative Cognitive Error Questionnaire; CPSS = Child PTSD Symptom Scale; CPSS-I = Child PTSD Symptom Scale—Interview; DBRS = Disruptive Behavior Rating Scale for Children; DESBRS = DeVereaux Elementary School Behavior Rating Scale; DISC = Diagnostic Interview Schedule for Children; DSM = Diagnostic and Statistical Manual of Mental Disorders; DPICS = Dyadic Parent–Child Interaction Coding System; ECBI = Eyberg Child Behavior Inventory; ECBI-IS = Frequency of Conduct Problem Behaviors; ERQ-CA = Emotion Regulation Questionnaire for Children and Adolescents; EuA = European Americans; FES = Family Experiences Inventory; FES = Family Environmental Scale; FFT-CF = Family-Focused Treatment for Child Depression; FS = Familiarity Scale; FSSC-R = Fear Survey Schedule for Children—Revised; FSST-R/P = Fear Survey Schedule for Children—Revised (Parents); FU = follow-up; GAIN = Global Appraisal of Individual Needs; GCBT = group cognitive behavior therapy; HCBC = Home and Community Social Behavior Scales; GAD = generalized anxiety disorder; HEBI = Health-Enhancing Behavior Index; H/L = Hispanic/Latinx; HPC = Homework Problem Checklist; HRSD = Hamilton Rating Scale for Depression; H-SC = Hopelessness Scale; HSPPC = Hartell Self-Prediction Profile for Children; ICBT = individual CBT; IOSA = Iowa Conners Rating Scale; IPPOC = Interactive Peer Play Observational Coding System; IPT = interpersonal therapy; IPT-AST = IPT plus adolescent skills training; ISP = individual supportive psychotherapy; IT = individual therapy; K-SADS = Schedule for Affective Disorders and Schizophrenia for School-Age Children; L-AMT = modified AMT; MASAC = Multidimensional Anxiety Scale for Children; MDFP = Multidimensional Family Prevention; ME = multiethnic; MEIM = Multi Ethnic Identity Measure; MFG = multiple family group; MFQ = Mood and Feelings Questionnaire; MFQC = Mood and Feelings Questionnaire—Child’s Version; MM = medication management; MST = multisystemic therapy; NOS = National Youth Survey; ODD = oppositional defiant disorder; PANAS = Positive and Negative Affect Schedule for Children; PARS = Pediatric Anxiety Rating Scale; PCT = Parent–Child Interaction Therapy; PHQ-9 = Patient Health Questionnaire; PIB = Penn Interactive Parent Total Scale; PMIEB = Peer-Report Measure of Internalizing and Externalizing Behavior; PMT = Parent Management Training; PTSD-14 = Patient Health Questionnaire; PTSD-54 = Parent Management Training Oregon; PPI = Parent Practices Inventory; PPQ = Parenting Practices Questionnaire; PPS = Parenting Practices Scale; PTA = Positive Thoughts and Actions; RBPC = Revised Behavior Problem Checklist; RCMAS = Revised Children’s Manifest Anxiety Scale; RCMAS-P = Revised Children’s Manifest Anxiety Scale—Parent Version; RECAP = Reaching Educators, Children and Parents; REE = Rational-Emotive Education; RPT = resilient peer treatment; SAD = separation anxiety disorder; SAS-A = Social Anxiety Scale for Adolescents; SAS-SR = Social Anxiety Scale for Children: Self-Report; SB = self-directed bibliotherapy; SBI = Sexual Behavior Instrument; SCAN = Schedule for Classroom Activity Norms; SCARED = Screen for Child Anxiety Related Emotional Disorders; SCARED-P = Screen for Child Anxiety Related Emotional Disorders—Parent Version; SCAS = Spence Children’s Anxiety Scale; S-CBT = standard-CBT; SDQ = Strengths and Difficulties Questionnaire; SEQSS = Self Efficacy Questionnaire for School Situations; SIQ-JR = Suicidal Ideation Questionnaire—Junior; SLSS = Student Life Satisfaction Scale; SMFQ = Short Mood and Feelings Questionnaire; SNAP-IV = Swanson, Nolan, and Pelham Questionnaire; SoP = social phobia; SoP = Self-Prediction Profile for Adolescents; SRDS = Self-Report Delinquency Scale; SSBS = School Social Behavior Scales; SS = Scale for Suicidal Ideation; SSIS-RS = Social Skills Improvement System—Rating Scales; SSRS = Social Skills Rating Scales; SST = study skills training; STAXI = State Trait Anger Expression Inventory; TASC = Test Anxiety Scale for Children; TBC = Teacher Behavior Checklist; TRF = Teacher Observation of Classroom Adaptation—Revised; TRF = Teacher’s Report Form; TTB = therapist-assisted bibliotherapy; UCLA-PTSD = UCLA PTSD Reaction Index for DSM-5; WPBIC = Walker Problem Behavior Identification Checklist; YPC = Youth Partners in Care; YRBS = Youth Risk Behavior Survey; YSR = Youth Self Report.
### TABLE 3
Level of Support Designations for Psychosocial Interventions Delivered to Ethnic Minority Youth

<table>
<thead>
<tr>
<th>Level 1: Well-Established</th>
<th>Level 2: Probably Efficacious</th>
<th>Level 3: Possibly Efficacious</th>
<th>Level 4: Experimental</th>
<th>Level 5: Questionable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Cognitive and behavioral [H/L: 2, 7]</td>
<td>None</td>
<td>None</td>
<td>Cognitive and behavioral [AfA: 3] Anxiety management training; Study skills training [AfA: 1]</td>
</tr>
<tr>
<td>Depression</td>
<td>Interpersonal [H/L: 11, 12, 16]; Cognitive and behavioral [H/L: 9]</td>
<td>Cognitive and Behavioral [H/L: 34, 42]</td>
<td>Cognitive restructuring, Response cost, Attributional intervention, Behavior therapy [AfA: 19, 24, 28]; Counselor or peer-led assertive training [AfA: 20]; Behavior therapy with medication management, Child Centered Play Therapy, Cognitive and behavior, [H/L: 28, 33, 35]; Parent training [AsA: 38]</td>
<td>None</td>
</tr>
<tr>
<td>Substance Use</td>
<td>None</td>
<td>None</td>
<td>Cognitive and Behavioral [H/L: 51]</td>
<td>None</td>
</tr>
<tr>
<td>Trauma</td>
<td>Resilient peer treatment [AfA: 52, 56]</td>
<td>Trauma-focused cognitive and behavioral [H/L: 55, 57]</td>
<td>Grief and Trauma Intervention plus Coping skills with or without trauma narrative processing [AfA: 59]</td>
<td>None</td>
</tr>
<tr>
<td>Stress Reactions</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Comorbid or Multidisorder</td>
<td>None</td>
<td>Parent management training, CBT [modular] [H/L: 63, 64]</td>
<td>Reaching educators, children and parents [AfA: 61]</td>
<td>None</td>
</tr>
<tr>
<td>Self-Injurious Behavior and Suicidality</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Level of support designations are described in Table 1. Number in brackets refers to the studies cited in Table 2. Only the studies contributing to the Level 1 to Level 5 classification are shown. Studies where the population sampled was labeled ethnic minority and analyses were not conducted with any specific ethnic minority group did not contribute to the classification because it is unclear whether findings would generalize to any specific ethnic minority group (e.g., Hispanic/Latino [H/L] or African American [AfA] or Asian American [AsA]).
intervention. Transdiagnostic interventions have not been tested with ethnic minority youth.

Cultural-Contextual Elements in Psychosocial Interventions for Ethnic Minority Youth

Cultural adaptation of interventions has been defined as the systematic modification of an evidence-based protocol to consider language, culture, and context in such a way that it is compatible with the individual’s cultural patterns, meanings, and values (Bernal, Jimenez-Chafey, & Domenech Rodríguez, 2009). Consistent with this definition, the ecological validity model (EVM; Bernal, Bonilla, & Bellido, 1995) has been the most widely used approach to program adaptation. More than half of the studies included in Table 2 reported adaptations along one or more of the parameters described by Bernal and colleagues. According to the model, Language refers to treatment being delivered in a language that is culturally appropriate and syntonic; Persons refers to, for example, interventionists being attuned to the characteristics of the cultural group, and the child and parent being comfortable with the characteristics of the interventionist; Metaphors refers to the treatment use of symbols and concepts that are shared by the cultural group; Content refers to treatments being consonant with the values, customs, traditions, and history of the cultural group; Concepts refers to the theoretical orientation of treatment being consonant with the cultural group; Goals refers to treatment goals being framed within the cultural values and expectations of the cultural group; Methods refers to treatment procedures being framed within the cultural values of the group; and Context refers to the economic, social, and individual contexts of the presenting problem (Bernal et al., 1995). Sibling models also have been proposed, including those focused on the broad structure of interventions (e.g., Lau, 2006; Resnicow, Baranowski, Ahuwalia, & Braithwaite, 1999; Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, 2000; Sue, 2006) and on opportunities for dynamic tailoring of culture specific elements on a case-by-case basis (Collins, Murphy, & Bierman, 2004; Pina, Holly, Zerr, & Rivera, 2014; Zayas, Bellamy, & Proctor, 2012).

Turning to the implementation of cultural adaptations in psychosocial interventions, as articulated by Barrera and Castro (2006), circumstances that justify adaptation include poor engagement (e.g., recruitment or retention), unique risk or protective factors underlying the intervention targets (e.g., discrimination) or that function differently in the focal cultural group, unique features in clinical presentation or presenting problem (e.g., ataque de nervios, loss of face), or poor intervention response (e.g., targeted mediators are not being modified in the expected direction). The circumstances articulated by Barrera and Castro align well with Lau’s (2006) position on cultural adaptation of evidence-based programs, which advocates theory and data-driven processes for determining if an intervention should be adapted and, if so, which intervention elements might be altered. Although many studies failed to describe the theoretical or empirical rationale for adapting an evidence-based intervention, adaptations were made in 32 of the 65 studies evaluated herein.

Table 4 lists the 32 studies for which cultural adaptations were explicitly reported (49% of identified studies). For each of these studies, the adaptations reported were classified using Bernal et al.’s (1995) EVM, Lau’s (2006) Selective and Directive (SD) approach, and Domenech-Rodriguez and Wieling’s (2004) heuristic model. Most studies (37/65, or 57%) incorporated adaptations consistent with EVM. Of the 37 studies, 12 studies reflected adaptations based on both EVM and SD approaches. Four studies were consistent with SD and two studies were consistent with the heuristic model.

Every intervention meeting the well-established or probably efficacious criteria was tested as a culturally adapted package or tailored in a systematic way to meet the needs of the individual child and family: CBT for anxiety in H/L youth; IPT for depression in H/L adolescents; multisystemic therapy for disruptive problems in AfA youth, CBT for disruptiveness in AFA youth, and family-based treatment for disruptiveness in H/L children and adolescents; family therapy for substance use in H/L adolescents; and peer resilient treatment for trauma stress reactions in AfA children. Examples of processes used to arrive at adaptations and tailoring parameters are described in Burrow-Sánchez, Minami, and Hops (2015); Cabiyà et al. (2008); Chavira et al. (2018); Lau, Fung, Ho, Liu, and Gudiño (2011); and Santisteban et al. (2003). Also, Barrera and Castro (2006); Castro, Barrera, and Holleran Steiker (2010); and Domenech-Rodriguez and Wieling (2004) described heuristic processes for arriving at adaptations and the identification of cultural parameters for tailoring (e.g., gather information, preliminary adaptations, pilot test adaptations, refine adaptations). Whitbeck (2006) likewise described culturally specific adaptation processes (review existing evidence, target group reviews existing evidence, cultural translation of risk and protective factors, identify unique risk and protective factors, conduct efficacy trial).

Moderators and Mediators of Intervention Response for Ethnic Minority Youth

Moderators are factors that indicate who benefits from intervention efforts, whereas mediators are the mechanisms of action affecting outcomes and specifying how intervention effects occur (Baron & Kenny, 1986; Kazdín & Weisz, 1998; MacKinnon, 2011). Ascertaining which youth benefit from psychosocial intervention efforts is important, as it may help guide intervention optimization. For instance, youth might evidence poor outcomes from a psychosocial intervention due to the moderating effects of migration-related stressors (e.g., persecution and torture in the country...
## Table 4
Inclusion of Cultural-Contextual Elements across Psychosocial Interventions Delivered to Ethnic Minority Youth

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Disruptiveness</th>
<th>Substance Use</th>
<th>Trauma</th>
<th>Comorbid or Multidisorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>K:</td>
<td>5/7 Studies</td>
<td>6/10 Studies</td>
<td>18/26 Studies</td>
<td>5/8 Studies</td>
<td>4/8 Studies</td>
<td>2/4 Studies CBT (Modular), MST</td>
</tr>
<tr>
<td>Interventions:</td>
<td>CBT</td>
<td>Interpersonal, CBT, Mindfulness</td>
<td>CBT, Child-Centered, Family-Based, Parent Training</td>
<td>CBT, Family-Based</td>
<td>CBT, Resilient Peer, Foster, Grief and Trauma Coping</td>
<td></td>
</tr>
</tbody>
</table>

### Adaptations

**Ecological Validity**

- Language
  - [5] [6] [7] [8] [9] [10] [12] [19] [23] [26] [29] [42] [45] [48] [42] [44] [56] [63] [61]
  - [8] [9] [10] [14] [17]
- Persons
- Metaphors
  - [5] [6] [7] [8] [9] [25] [28] [32] [33] [34] [45] [42] [42] [51] [53] [55] [58]
- Content
  - [5] [7] [8] [9] [25] [28] [32] [33] [34] [42]
- Concepts
  - [5] [6] [7] [8] [9] [25] [28] [32] [33] [34] [42]
- Goals
  - [5] [7] [8] [9] [42]
- Methods
  - [3] [5] [8] [14] [21] [28] [42] [51]
- Context
  - [5] [6] [8] [9]
- Engagement
  - [5] [6] [8] [9] [10] [14] [17] [37] [38] [42]

### Selective and Directive Engagement

- Effects
  - [2] [3] [5] [6] [7] [28] [42] [53]

### Heuristic or Culturally Specific

- Unique risk
- Unique resilience-symptoms
- [20] [38] [42] [48]

### Note:

Numbers in brackets refer to the studies cited in Table 2. From the ecological validity model, Language refers to treatment being delivered in a language that is culturally appropriate and syntonic; Persons refers to, for example, interventionists being attuned to the characteristics of the cultural group, and the child and parent should be comfortable with the characteristics of the interventionist; Metaphors refers to the treatment use of symbols and concepts that are shared by the cultural group; Content refers to treatments being consonant with the values, customs, traditions, and history of the cultural group; Concepts refers to the theoretical orientation of treatment being consonant with the cultural group; Goals refers to treatment goals framed within the cultural values and expectations of the cultural group; Methods refers to treatment procedures being framed within the cultural values of the group; and Context referring to the economic, social, and individual contexts of the presenting problem (Bernal et al., 1995). For Selective and Directive, decisions about whether to adapt and what to adapt should be guided by evidence (Lau, 2006). For Heuristic, gather information, preliminary adaptations, pilot test adaptations, refine adaptations (Barrera & Castro, 2006; Castro et al., 2010; also see Domenech-Rodriguez & Wieling, 2004). Self-injurious or suicidality had no adapted protocols and thus is not shown in Table 4. K = the number of studies reporting cultural adaptations or tailoring relative to the total number of studies classified in terms of the primary clinical foci or outcome; CBT = cognitive behavioral therapy; MST = multisystemic therapy.
of origin, detention in refugee camps). In this case, the moderator signals that additional resources might need to be in place to activate program components associated with the desired outcomes. Thus, knowledge of moderators, especially modifiable moderators, could guide the development of more robust interventions for ethnic minority youth who are nonresponsive to seemingly efficacious protocols (Interian, Lewis-Fernández, & Dixon, 2013). In terms of mediators, knowledge of intervention-related mechanisms of change is important, as it may help guide new intervention models, improve the precision of established interventions, and even refine psychosocial change theories (Kazdin, 2007). Illustratively, interventions could become more precise in affecting planned outcomes by amplifying the dosage of critical behavior change components (e.g., enhancing parent–child relationship by targeting child–caregiver conflict from enculturation gaps) while minimizing or removing the less essential elements. Thus, mediator-driven interventions may help augment program effectiveness, reduce health disparities, and produce positive and sustained outcomes for ethnic minority youth.

Turning to data relevant to well-established and probably efficacious interventions, 13 studies found that ethnicity did not moderate treatment effects. In addition, eight studies found significant ethnicity moderation effects. In all but one, fewer benefits were found for ethnic minority youth than for their EuA counterparts (see Table 2). That is, MST led to faster recovery than hospitalization for AfA youth than for their EuA counterparts (Huey et al., 2004). Beyond moderation by ethnicity, Vaclavik et al. (2017) found that youth in peer-involved CBT for child anxiety benefited more than those in parent-involved CBT when parents reported low acculturation to U.S. culture. Parent-involved CBT was most effective for youth when reports high acculturation. Shifting to data on mediation, only two studies tested mediation by accounting for temporal order. In Pantin et al. (2009), the effects of a family-based intervention on reducing substance use was partially mediated by improvements in family functioning for H/L youth. In Lochman and Wells’s (2002) work with AfA youth, the effects of a CBT intervention on lowering rates of delinquent behavior were mediated by improvements in consistent caregiver discipline and reductions in youths’ levels of hostile attributional biases and anger. Similarly, behavioral improvements at school were mediated by reductions in youths’ hostile attributional biases and associated anger (Lochman & Wells, 2002). No other temporal mechanisms of change (or mediators) are known for well-established or probably efficacious interventions, yet temporal mediation is about the only known approach that can shed light on the cause–effect relations between an intervention and its planned outcomes (Carper, Makover, & Kendall, 2018).

DISCUSSION

Clinicians should preferentially use evidence-based psychosocial interventions that have been formally evaluated and found to be efficacious with individuals that represent the ethnic minority child and family they are serving. This recommendation is consistent with practice guidelines for working in the contexts of cultural diversity and the official report from the Task Force on Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality (American Psychological Association, 2017; Pumariega et al., 2013). Thus, efforts should be made to educate the public as well as providers regarding interventions that are highlighted in this review, especially those found to be well-established for at least one ethnic minority group. Furthermore, psychosocial interventions found to work with ethnic minority youth (adapted and nonadapted) should be made accessible to practitioners, psychology training programs, consumers, and third-party payers.

Based on this evidence-based status evaluation, the first line of intervention should be those deemed well-established. The following psychosocial interventions are well-established: cognitive and behavioral treatment for anxiety in H/L youth, multisystemic therapy for disruptiveness in AfA youth, and family-based therapy for disruptiveness and substance use in H/L youth. In the absence of interventions deemed well-established, probably efficacious protocols are recommended. Based on this update, the following psychosocial interventions are probably efficacious: IPT for depression in H/L adolescents, cognitive and behavioral treatment for disruptiveness in AfA youth, and resilient peer treatment for AfA youth with trauma stress reactions. In the absence of probably efficacious interventions known to work for ethnic minority youth, our recommendation is to consider possibly efficacious protocols (see Table 3). When the recommendation to consider possibly efficacious protocols cannot be implemented, evidence-based interventions tested with EuA youth should be considered, expressly those interventions that can be implemented with enough flexibility so that cultural adaptations may be applied, as necessary, without diluting effectiveness potential.

Recently the American Academy of Child and Adolescent Psychiatry listed key parameters that can inform the identification of cultural adaptation entry points (Pumariega et al., 2013), whereas Pina, Holly et al. (2014) described an approach for culturally and dynamically tailoring evidence-based psychosocial interventions using adaptive features. Together, the work of Pumariega et al. and Pina et al. may be applied when there is evidence that, for example, the chosen intervention is not serving the child and family as anticipated. In these cases, cultural differences in developmental progression of mental health problems, idiomatic expressions of distress, and/or symptomatic presentation for
different disorders should be carefully considered as pathways to refine clinical treatment formulation and delivery. To this end, the American Psychiatric Association (2016) has a cultural formulation interview that may prove to be useful to the clinician, albeit additional research is desirable.

Over the past decade, there has been a substantial increase in the number of studies evaluating psychosocial interventions for child and adult populations inside and outside of the United States (Polo et al., 2018; Weisz et al., 2017). Although more randomized clinical trials have been conducted with ethnic minority samples, many studies continue to fail to report on ethnicity and other sociodemographic characteristics of the participants (Polo et al., 2018). Despite increased ethnic diversity in the demographic characteristics of the U.S. youth population, lack of representation of ethnic minority youth in RCTs remains a major problem (Polo et al., 2018). Furthermore, there are missed opportunities to evaluate ethnicity moderation effects in those studies that report ethnicity and include substantial numbers of ethnic minority youth. In fact, only about one in 10 trials with significant ethnic minority participants reported moderation effects in outcome analyses (Polo et al., 2018). Moreover, there are other critical problems outlined in the initial status report by Huey and Polo (2008) that remain unexamined or ignored. For instance, AsA and Native American youth are still largely absent from the treatment outcome literature, only a handful of studies include predominantly low acculturated or immigrant youth, and serious mental health problems among ethnic minority youth are overlooked (e.g., suicidal behavior; Bridge et al., 2018). Although some trials test moderation by ethnicity/race, nativity, or language used, those variables have limited explanatory influence on the outcomes compared, for example, to enculturation or ethnic identity. Also, studies tend to infuse culture-related strategies, content, and processes into interventions but do not tend to articulate the theoretical rationale or systematically test such strategies, and they often lack the sample sizes needed to evaluate key culture-contextual questions or appropriate outcomes via culturally validated measures.

We anticipate that careful consideration of culture-related strategies, content, and processes might help improve intervention theory development in ways that may remediate some of the null effects of psychosocial interventions on certain outcomes. Briefly, although most published interventions show positive effects on many factors, nearly all RCTs (if not all) show null effects on at least one assessed outcome, and usually more. For instance, for H/L youth with depression, Rosselló and Bernal (1999) found that neither CBT nor IPT resulted in significant changes in perceived criticism, intensity of emotional involvement, or adolescent social abilities. For disruptiveness among AfA youth, Henggeler et al. (1997) reported that MST did not reduce rearrests or self-reported delinquency. For H/L youth with disruptive behavior, for example, Pantin et al. (2009) found that family-based therapy did not have significant effects on sexual initiation, parent involvement, or family support. Szapocznik et al. (1989) found that family-based therapy did not result in changes in youth behavior problems, and changes in overall functioning were not maintained over time. Also, for H/L youth with behavior problems and substance use, Santisteban et al. (2003) and Szapocznik et al. (1989) found that family-based therapy did not have beneficial effects on family functioning. Last, for trauma-stress reactions in AfAs, resilient peer treatment showed no effects on verbal assertion (Fantuzzo, Manz, Atkins, & Meyers, 2005; Fantuzzo et al., 1996). Knowing the limits of interventions (especially those meeting criteria as well-established or probably efficacious) is important in clinical practice and in research as this knowledge can provide directions for program reengineering, refining program theory, and improving the precision of mediators that can influence program targets. Thus, it is incumbent on the next generation of psychosocial intervention science with ethnic minority youth to uncover new and better ways to ameliorate the impact of risk and potentiate protective processes to better leverage positive program effects.

Moving forward, the knowledge gaps articulated by Huey and Polo (2008) need to be filled. We must also address other equally important questions so that evidence-based psychosocial interventions can be adopted and sustained in real-word settings. One first step is to start moving beyond efficacy studies. Efficacy trials adhere to generally stringent inclusion/exclusion criteria. Are some minority youth with mental health illness undetected or disqualified from efficacy trials because target problems present differently? We know that commonly used assessment measures may result in misclassification of minority youth due to a lack of measurement equivalence, particularly regarding clinical threshold scores (Crockett, Randall, Shen, Russell, & Driscoll, 2005; Holly, Little, Pina, & Caterino, 2015; Pina, Little, Wynne, & Beidel, 2014). Efficacy trials also embody barriers to the inclusion and retention of ethnic minority youth because those studies typically take place in university laboratories, which are often perceived as difficult to access (Abe-Kim et al., 2007; Freedenthal & Stifman, 2007; Kouyoumdjian, Zamboanga, & Hansen, 2003; Snowden & Yamada, 2005; Suite, La Bril, Primm, & Harrison-Ross, 2007). Efficacy trials tend to rely on interventionists (e.g., graduate students) serving under high levels of fidelity to manuals with low levels of in-depth cultural training or supervision, who are mostly EuA and English monolingual (as high as 76%; American Psychological Association, Center for Workforce Studies, 2010). Are these factors interfering with the development of the therapeutic bond with ethnic minorities and resulting in nonengagement and eventual dropout (Valenzuela & Smith, 2016)?

Intervention research with ethnic minority youth needs to emphasize external validity (e.g., few inclusion and exclusion
criteria), consider the relevance of mental health services in communities, and capitalize on typical infrastructures where ethnic minorities are found (e.g., schools, neighborhood clinics, emergency rooms, child welfare; Asarnow et al., 2005; Chavira et al., 2014). Investigators need to more carefully consider geographical and transportation restrictions in the provision of care, which are key barriers for many families of color (Yancey, Glenn, Bell-Lewis, & Ford, 2012). There also is a need for greater emphasis on uncovering the drivers of treatment success and failures, including youth and family engagement (e.g., attendance, session engagement, home practice completion, situated skill application; Berkel, Mauricio, Schoenfelder, & Sandler, 2011; Dane & Schneider, 1998; Durlak & DuPre, 2008). For example, in some ethnic minority families, grandparents are influential in maintaining the philosophy that mental health problems are a source of shame and stigma (National Center for Family & Marriage Research, 2013), thus contributing to nonengagement or premature termination (Zerr & Pina, 2014). Other factors relevant to intervention success and failure may include past experiences interacting with health providers (e.g., feeling misunderstood, receiving inadequate attention and explanations about the problems), having received inadequate intervention options (Flores, Olson, & Tomany-Korman, 2005; Guerrero, Chen, Inkelas, Rodriguez, & Ortega, 2010), and holding historically and culturally informed views of mental health problems (Yeh, Hough, McCabe, Lau, & Garland, 2004; Yeh et al., 2005) that do not fit with intervention goals and implementation strategies as often manualized.

Looking ahead, the field is on firmer ground than 10 years ago to better balance internal and external validity in the study of psychosocial interventions for ethnic minority youth. There is reason for optimism, given that the number of well-established psychosocial interventions for ethnic minority youth has improved from zero 10 years ago (Huey & Polo, 2008) to four today. However, we also know that earmarking a psychosocial intervention as well-established does not necessarily translate into policy or readiness for adoption, sustainability, or scaling up. As articulated by Elliott and Mihalic (2004); Fagan and Mihalic (2003); Flay et al. (2005); and Greenberg, Domitrovich, Graczyk, and Zins (2005), there need to be resources for adequate dissemination and implementation. Initial resources may include high-quality training, monitoring and technical assistance, and disclosures about costs (e.g., staff training, on-site time, space, equipment, reproduction of materials; Chatterji, Caffray, Jones, Lillie-Blanton, & Wertheram, 2001; Foster, Dodge, & Jones, 2003). Over time, there needs to be ongoing communication between researchers and providers about the conditions under which the intervention is working, maintenance of program effects, booster sessions, availability of innovative efficiencies (e.g., digital health tools), and regular cost–benefit evaluation reports. Therefore, scaling up evidence-based psychosocial interventions for ethnic minority youth means having essential armamentaria in place so that children and families can benefit from the intervention science knowledge we are collectively producing.

CONCLUDING REMARKS

Four psychosocial interventions now meet the highest standard of evidence (i.e., well-established) for H/L and AfA minority youth and eight interventions were identified as probably efficacious or possibly efficacious, with most protocols drawing on cognitive behavioral therapy, family systems models, or both. Moreover, 10 intervention brand names have started to move toward scaling up and are now listed on state-level or national clearinghouses. The California Evidence–based clearinghouse lists the following: Interpersonal Therapy for depression, Parent Child Interaction Therapy for disruptive behavior problems, and three types of family-based therapy for substance use (MST, Brief Strategic Family Therapy, Ecologically-based Family Therapy). The Child Trends clearinghouse lists the following: Anger Coping Program, Cognitive and Behavior Intervention for Trauma in the schools, and trauma-focused CBT. Last, the Suicide Prevention Resource Center lists the following: Family Intervention for Suicide Prevention and MST with Psychiatric Supports (MST-Psychiatric).

At the same time, there are many non-evidence-based programs obstructing the adoption and sustainability of evidence-based psychosocial interventions (Aarons, Horowitz, Dlugosz, & Elhart, 2012; Owen, Goode, Fjeldsoe, Sugiyama, & Eakin, 2012) even though data show that those efforts disadvantage many youth and families (e.g., lack of sustained effects, if any; Lilienfeld, Ammirati, & David, 2012; Zaboski, Schrack, Joyce-Beaulieu, & MacInnes, 2017). These are the same youth and families who have much to gain from evidence-based psychosocial interventions, particularly ethnic minorities who typically are the most underserved in terms of mental, emotional, and behavioral health needs. It takes, on average, 17 years for evidence-based programs to become “certified” as efficacious and considered for broad diffusion (Balas & Boren, 2000; Rotheram-Borus, Swendeman, & Chorpita, 2012). This generally includes 2 years for development and pilot testing, 5 years for an efficacy trial (evaluation under ideal conditions), a second 5-year efficacy trial (refinement, replication), and then 5 more years for effectiveness testing (under real-world conditions; Rotheram-Borus et al., 2012; Schoenwald & Hoagwood, 2001). This process is simply too long (Colditz, 2012; Spoth et al., 2013), if we aim to reduce ethnic disparities in mental health outcomes in a just manner. Thus, the needs of ethnic minority youth must be better served by intervention science.
ACKNOWLEDGMENTS

We are grateful to Ryan D. Stoll and Roberto E. Varela for their thoughtful feedback on this article. We acknowledge Navneet Kaur for assisting with technical revisions, as well as Skyler Mendes and Hardian Thamrin who served as independent coders for the interventions.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

REFERENCES


